



June 29, 2018

Independent Reasonable Assurance Report

To: the Directors of the Canadian Wireless Telecommunications Association (CWTA) on selected non-financial information included in the CWTA 2017 Annual Report

Scope

We have been engaged by the Canadian Wireless Telecommunications Association (“CWTA”) to perform a reasonable assurance engagement in respect of the following information (the “Selected Information”) detailed in Appendix A, and also included within CWTA’s 2017 Annual Report to the Director of Extended Producer Responsibility Programs (“Director”) at the Ministry of the Environment, Government of British Columbia (“MOE”), as hosted on the CWTA website¹ for the year ended December 31, 2017:

- the location of collection facilities, and any changes in the number and location of collection facilities from the prior year in accordance with Section 8(2)(b) of the British Columbia Regulation 449/2004 Recycling Regulation (“Recycling Regulation”);
- the description of how recovered product was managed in accordance with the pollution prevention hierarchy in accordance with Section 8(2)(d) of the Recycling Regulation; and
- the total amount of the producers’ product collected for the year ended December 31, 2017 in accordance with Section 8(2)(e) 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 Auditing and Assurance Standards Board (IAASB), and the *Guide to Third Party Assurance for Non-Financial Information in Annual Reports – 2017 Reporting Year* (“Assurance Requirements”), published by the MOE.

CWTA

CWTA is responsible for the preparation and fair presentation of the Selected Information in accordance with the evaluation criteria as listed in Appendix A.

¹ The maintenance and integrity of the CWTA website (<http://www.cwta.ca/about-cwta/advocacy/provincial/>) is the responsibility of CWTA; the work carried out by PricewaterhouseCoopers LLP does not involve consideration of these matters and, accordingly, PricewaterhouseCoopers LLP accepts no responsibility for any changes that may have occurred to the reported information or criteria since they were posted on the website.



Management is also 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.

CWTA is 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 that may relate to the Selected Information. CWTA is also responsible for demonstrating adherence to the Recycling Regulation as outlined within Section 1 of the Annual Report to the Director.

Our independence and quality control

We have complied with the relevant rules of professional conduct / code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies the International Standard on Quality Control 1, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

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 included:

- 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 the evaluation criteria.

Conclusion

In our opinion, the Selected Information for the year ended December 31, 2017 presents fairly, in all material respects, in accordance with the evaluation criteria listed in Appendix A:

- the location of collection facilities, and any changes in the number and location 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 Section 8(2)(d) of the Recycling Regulation; and
- the total amount of the producers' product collected for the year ended December 31, 2017 in accordance with Section 8(2)(e) 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 CWTA'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 CWTA, 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 CWTA's compliance with the Recycling Regulation.

PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants

June 29, 2018



Appendix A – Results and evaluation criteria

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 Recycling Regulation, as presented on pages 2, 7 and Appendix F of CWTA's 2017 Annual Report to the Director.

Result:

The number of permanent drop-off locations is 266. This is a net increase of 43 locations from the previous year. Appendix F of the report lists all drop-off locations in British Columbia by Program/Location Name, Account, Community and Regional District.

Reference: pages 2, 7 and Appendix F of CWTA's 2017 Annual Report to the Director.

Method of reporting:

- Reporting Period: January 1 to December 31.
- The number of Permanent Collection Facilities is reported in the Annual Report and consists of the number of Collection Facilities that were listed in the Recycle My Cell searchable database. The information recorded in this database is generated based on data updates provided by Carriers and non-carrier registrations. CWTA has worked with Carriers to generate data collection procedures detailing the types of drop-off locations which should be included or excluded in the reported data.
- Temporary, Processors/Consolidation Centres, and Reverse Logistics Centres/Warehouse Collection Facilities may be identified and reported to CWTA by Program Participants. These are compiled separately and may only be disclosed as a total number in the Annual Report.

The change in number and/or location of Permanent Collection Facilities is derived from the net difference from the previous year.

Definitions:

- In B.C. Reg. 449/2004, collection facility" means (c) in respect of a product within the empty oil container product category, electronic and electrical product category, tire product category or packaging and printed paper product category, a collection facility established by the producer.
- "Collection Facilities" are one of the following types of locations that are active as of December 31, 2017:
 1. Permanent – Carrier identified retail locations and franchisees, or other approved third party operators (e.g. non-affiliated retail stores, libraries, municipal centres, etc.) that host Recycle My Cell collection boxes year round. These locations are accessible by consumers and included in the Recycle My Cell searchable database;
 2. Temporary – Carrier identified locations, or other third party operators (e.g. schools, offices, etc.) that host collection boxes for a limited period of time, seasonal drives and challenge-based drives or other limited temporary collection activities. These locations are not included in the

Recycle My Cell searchable database;

3. Processors/Consolidation Centres – Facilities that receive Program Products via recovery mechanisms (product that is recovered via Mail-backs or delivered by couriers). These locations are not accessible by consumers; or
 4. Reverse Logistics Centres/Warehouses – Facilities where Program Products under warranty are returned. These locations are not accessible by consumers.
- “Collection Facilities” are not Canada Post or courier service providers (e.g., FedEx) locations.
 - “Program Participants” include carriers, manufacturers and processors as identified in the Annual Report.
 - “Program Products” are all products included in the program as listed in the currently approved product stewardship plan. These include:
 - “Mobile devices”:
 - Cellular phones (with and without batteries)
 - Smartphones (with and without batteries)
 - Pagers
 - Wireless PDAs
 - Air cards
 - Accessories (all additional parts that may come with the phone including chargers, headsets, cables, etc.); and
 - Cellular phone and Smartphone batteries.

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 as presented on pages 2, 8, 9, 10 and 11 of CWTA’s 2017 Annual Report to the Director.

Result:

- Of the volume of cellular devices audited (54,686), 74% were sent for reuse and 26% were sent for recycling.
- The dispositions of materials/components as outlined in Table 1, pages 9-10.
- The end fate descriptions as outlined in Table 3, page 11.

Reference: pages 2, 8, 9, 10 and 11 of CWTA’s 2017 Annual Report.

NOTE: The selected information does not include the material sent to an R2 primary processor because insufficient data was obtained by the time of the audit. This is described on page 10.

**Method of reporting:**

- Reporting Period: January 1 to December 31.
- Processor selection is a business decision made by Program Participants based on a short list of accepted processors that maintain specific certifications and provide required services.
- Only devices that have been identified for recycling are audited since devices that have been identified for reuse are not likely to end up in landfill. Furthermore, CWTA has opted to leverage and focus reporting efforts on primary processors that are approved by the Recycler Qualification Office (RQO) or certified by the Responsible Recycling (R2) standard.
 - The devices sent for recycling are handled by RQO-approved or R2-certified processors.
 - Verification and confirmation that Primary Processors have sufficient environmental and safety oversight was done by viewing the RQO approval or R2 certification documentation for the 2017 reporting year.
- The downstream material flows and expected end fates of materials are based on information provided by the RQO-approved processors and supporting process documents.

Definitions:

The Pollution Prevention Hierarchy includes the following:

- “Reuse” – Wireless devices and batteries that can be resold or donated as a complete unit.
 - The Program Product may or may not be refurbished.
 - Program Products can be resold both within and outside the BC market.
- “Recycle” includes:
 - Wireless devices that cannot be reused as a complete unit.
 - Wireless devices that have been broken down and harvested for parts (e.g. plastic).
 - Any commodities that are captured from the recycling process, such as through metal recovery.
 - “Metal Recovery” relates to a recycling process where any element of the Program Product is extracted for next use (e.g. circuit boards are smelted and broken down to separate commodities).
- “Energy Recovery” relates to processing activities where any element of the Program Product is harvested to create energy.
- “Waste” includes any residual material from Program Products not captured in the three streams above (may include comingled packaging, etc.) and may go to landfill.
- “Other waste disposal” includes other approved and commercially-viable end fates not captured in the four streams above.



- “End fate” is defined as final processed state of each material commodity before reuse in another product or shipment to landfill.

3. The total amount of the producer’s product sold and collected and the recovery rate as presented on pages 2 and 13 of CWTA’s 2017 Annual Report to the Director.

Result:

Total amount of producer’s product collected in 2017 is 56,732 devices. Of this volume 96% (54,686) of the material was verified.

Reference: pages 2 and 13 of CWTA’s 2017 Annual Report.

Method of reporting:

- Reporting Period: January 1 to December 31.
- Quantification of Product Collected is based on:
 - Reports generated by the Processors/Consolidation Centres and potentially Reverse Logistics Centres/Warehouses Collection Facilities during the Reporting Period
 - These reports are generated from their individual inventory programs for the Reporting Period and are broken down by province of origin.
 - These reports include delineation of products by province of origin to the carriers and non-carrier members.
 - Consolidated values for each product category are reported by quantity and end fate per product type.
 - Product Collected this is not reported includes carrier internal initiatives such as warranty repairs, devices returned because of buyer’s remorse or damage, etc.
- Products Collected from unknown origin are accounted for using an estimate based on products returned that are of known origin, or attributed to the province in which the Carrier is headquartered. In the instance where amount is estimated the following process is used:
 - The amount of material collected from known origins is determined for each province. An aggregate total is also determined for Canada. Based on this information, the percentage of product recovered specifically from BC is determined. For example, if 10 devices were recovered from BC and a total of 100 devices were collected nationally, the percentage coming from BC would equal 10%.
 - The amount of material collected from unknown origin (where boxes are received at Processors/Consolidation Centres without a unique identifying number, or those collected via mail-back) are aggregated into a total quantity received. The known percentage (in this case 10%) would then be attributed to the aggregate of unknown origin to determine the estimate of



what may have originated from BC.

- Products Collected can be reported as either weight or number of units and is dependent on the identified end fate of the product type (reuse vs. recycling).
- A conversion factor of 0.2kg/device is used for converting number of units to weight. This conversion factor is based on the standard unit applied by Ontario Electronic Stewardship, the Waste Diversion Ontario approved stewardship program that recovers cell phones and utilize weight for reporting. (Source: Final Revised (Phase 1 and 2) Waste Electrical and Electronic Equipment (WEEE) Program Plan)

Definitions:

- “Program Products” are all products included in the program as listed in the currently approved product stewardship plan. These include:
 - “Mobile devices”:
 - Cellular phones (with and without batteries);
 - Smartphones (with and without batteries);
 - Pagers;
 - Wireless PDAs; and
 - Removable External Air cards.
 - Accessories (all additional parts that may come with the phone including chargers, headsets, cables, etc.); and
 - Cellular phone and Smartphone Batteries.
- Products not included in the program:
 - Cordless phones;
 - Regular batteries (rechargeable or single use);
 - Tablets; and
 - PDAs without integrated cellular connectivity, laptop computers and answering machines.
- “Product Collected” is the estimated sum total of all Mobile Devices collected by any Collection Facility.



Appendix B – Exclusions

CWTA 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, 2017 as the approved stewardship plan does not outline the requirement to report 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 as outlined in the Assurance Requirements.

CWTA has not reported its performance for the year in relation to approved targets under 8(2)(b), (d) and (e) in accordance with 8(2)(g) of the Recycling Regulation for the year ended December 31, 2017 as CWTA is not required to report this to the Director as there are no targets set in the approved stewardship plan for these sections applicable to the reporting year.