

# **TECHNICAL MEMO**

ISSUED FOR USE

To: Shannon White Date: October 1, 2018

c: Memo No.: 1

From: Tamara Shulman File: 704-SWM.PLAN03058-01

Belinda Li

**Subject:** Landfill Solid Waste Audit Results Summary

#### 1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by the District of Squamish (the District) to conduct a Landfill Solid Waste Audit. The waste sampling and sorting was conducted in July 2018 at the District's landfill. This report summarizes the methodology, results, and analysis from the study.

#### 1.1 Background

The District of Squamish, population 19,893, is one of the fastest growing communities in British Columbia and a sought-after destination recognized for its culture, recreation and mountain lifestyle. As the outdoor recreation capital of Canada, there is a dedicated and passionate environmental movement striving to protect the environment and enhance the ecosystem.

The District operates one municipal landfill that has an expected lifespan to the year 2026. To support the community's commitment to environmental sustainability and preserve landfill capacity, the District launched an ambitious Zero Waste Strategy with a goal of reducing waste to 350 kg/capita/year by 2020 and 150 kg/capita/year by 2040.

The District completed a waste audit in 2016 to serve as a baseline estimate of the types of materials being landfilled by sector and identify materials with the highest diversion potential such as food scraps to inform zero waste program development. The 2018 waste audit results presented herein are intended to track progress and update these results. Additionally, visual audits of the construction and demolition sector were conducted to determine composition of this waste stream.

# 1.2 Scope of Work

The scope of work for the study included sampling and sorting waste that arrived at the District Landfill from the following waste-generating sectors:

- Single Family Residential (SF);
- Multi-Family Residential (MF);
- Institutional, Commercial, and Industrial (ICI); and





Construction and Demolition (C&D).

Data was compiled and analyzed by sector to estimate the composition of the waste stream by material type and overall diversion potential. Results were also compared with the waste audit conducted in 2016.

In addition to sorting waste by the District's categories, an extended producer responsibility (EPR) characterization study was conducted in parallel through a partnership with Stewardship Agencies of British Columbia (SABC).

### 2.0 METHODOLOGY

Tetra Tech's sampling methodology is based on the Canadian Council of Ministers of the Environment's Recommended Waste Characterization Methodology for Direct Waste Analysis Studies in Canada.

### 2.1 Health and Safety

The waste audit was performed by a supervisor and three environmental technicians trained on safety and sorting procedures prior to the fieldwork. Personal protective equipment was used by staff according to the specifications of Tetra Tech's Health and Safety Plan, which factored in special requirements for working at the District's landfill during summer weather conditions. Extreme heat and strong wind conditions were present during the week of the audit. To mitigate the risk of heat-related conditions (e.g., heat exhaustion, heat stroke, sunburn), staff used lighter coveralls, started work in the early morning when temperatures were cooler, worked under large tents, and took more frequent water/cooling breaks. Heavy-duty tent weights and tie-downs were used to mitigate wind-related hazards. Safety meetings were conducted daily to emphasize key concerns including how to handle hazards such as environmental conditions, sharps or hazardous materials, safe lifting of garbage bags, and working around large equipment.

## 2.2 Sampling Plan

Tetra Tech prepared a sampling framework based on the anticipated truck loads delivered to the District's landfill from July 23 to 27, 2018. Tetra Tech coordinated with the District and with GFL Environmental Inc. (GFL), the District's waste collection contractor, to identify trucks for sampling. Arrangements were made to split commercial waste collection routes to isolate MF residential loads from ICI loads. It was not possible to isolate MF waste in a designated truck.

The number of samples sorted by sector is presented in Table 1. Tonnage data from 2017 is included in this table by sector. Note that ICI and multi-family residential loads are mixed; therefore, their tonnages are combined. Based on conversations with truck drivers and visual observations of tipped loads, it was assumed that MF residential waste comprises 25% of commercial loads.





Table 1:	Samples	Completed by	y Sector
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Sector	Waste Received (tonnes) January 1 to December 31, 2017	Number of Samples Sorted	
SF	2,623	7	
MF <sup>1</sup>	1,825	5	
ICI <sup>1</sup>	5,475	8	
C&D	1,535	7	
Total of Sectors Analyzed	11,458	27	
Total Waste Landfilled	12,108		
Percent of Waste Represented in Audit	95%²		

<sup>&</sup>lt;sup>1</sup> MF and ICI waste is mixed as Commercial Waste. Total tonnage in 2017 was 7,300 kg. Assumed 25% of Commercial Waste is MF and 75% is ICI.

### 2.3 Load Identification and Sample Selection

The Tetra Tech supervisor worked with GFL staff at the landfill to identify loads for sampling. Collection trucks (or private vehicles for some C&D loads) tipped waste materials by the active face the landfill. For all waste sectors except C&D, the Tetra Tech supervisor selected a random location in the load for a loader to extract one scoop (approximately 300 to 500 kg) of material for the waste audit. In the case of split ICI and MF residential loads, a random location was chosen at the front or the back of the load to increase the probability of obtaining waste that is only from one sector; truck drivers collected from MF residential locations first before starting with ICI locations.

#### 2.4 Sample Sorting

#### 2.4.1 Hand Sorting

A random sample of 100 kg was obtained from the load and sorted by hand into 12 primary categories, which were further divided into 31 material subcategories. The primary categories were paper, plastic, metal, glass, organics, building material, electronic waste, household hazardous waste, household hygiene, bulky objects, textiles, and fines. A complete list of the categories, along with their descriptions, can be found in Appendix B. Appendix E contains select photographs of commonly used categories.

Following sorting of materials, each material type was weighed and recorded on a data form.

#### 2.4.2 Visual Auditing

C&D samples were visually audited. The categories for C&D materials were the same as hand sorted materials but included an additional six secondary C&D material categories within the building materials category (i.e., gypsum/drywall plaster, masonry, rocks/sand/dirt/ceramic/porcelain, rigid asphalt products, and carpet waste/underway). At least two staff walked around a C&D load to visually estimate composition by volume first by primary categories, then secondary categories. Staff recorded results individually, then compared the results and an average was taken. The average results were then recorded on a data form.



<sup>&</sup>lt;sup>2</sup> Some types of waste without the sector identified were not assessed as part of the waste audit.



#### 2.4.3 Extended Producer Responsibility Sorting

Waste materials were re-sorted into an additional 169 categories following sorting of waste materials into the District's categories. These re-sorted categories were then weighed and recorded on a data form. A list of EPR categories can be found in Appendix C.

### 2.5 Data Analysis

Data was compiled into primary and secondary categories by weight. For visual audits, standard densities of waste materials were used to convert volume estimates to weight estimates; all results are presented and calculated on a weight basis. The weighted average composition for each sector was calculated for each material category. The overall composition was calculated by extrapolating the weighted average composition by sector to estimated tonnages of waste by sector. Data was also compared with results from the 2016 waste audit at the primary material category level for each sector.

#### 3.0 RESULTS

Results from the waste audit are first presented in aggregate based on a weighted average across sectors, then by sector. Detailed results by secondary material categories are included in Appendix D.

#### 3.1 Combined Waste Audit Results

Figure 1 presents the average primary material composition of garbage for the SF residential, MF residential, ICI, and C&D sectors combined. A weighted average was calculated based on 2017 tonnages of landfilled material. The largest component was organics (46.8%), followed by household hygiene (14.0%), and paper (13.1%). Organics mainly comprised food waste (30.3%) and wood waste (15.6%). The breakdown of food waste was 20.4% avoidable (i.e., edible) and 9.9% unavoidable (i.e., inedible parts of food). Wood waste was further separated by divertability based on whether it could be composted (3.4%), used for co-generation (9.6%), or landfilled (2.5%). Note that wood waste comes primarily from C&D sources, and the composition of wood waste from C&D is more than 20% whereas from other sectors it is less than 2%. Paper mainly comprised compostable paper (6.6%) and recyclable paper (6.0%).





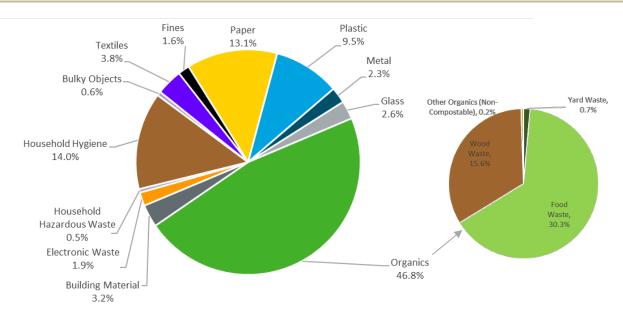


Figure 1: Primary Category Composition – Combined Sectors (N=26)

#### 3.1.1 Diversion Potential

Based on the combined waste audit results, the percentage of materials that could be diverted from landfill was estimated and presented on Figure 2. The materials were categorized as curbside recyclable (accepted in blue bin), curbside compostable (accepted in green bin), depot/drop-off (divertable by dropping off at a depot, donation or transfer facility), and residual (landfilled). Classifications for what can be diverted through recycling or composting can be found in Appendix B.

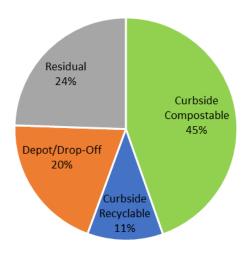


Figure 2: Diversion Potential of Currently Landfilled Material (Excluding Wood Waste)



## 3.2 Single Family Residential

Six of the seven single family residential samples were included for analysis as one was considered an outlier due to the large presence of C&D materials (more than 40%), which is uncharacteristic of typical single family residential waste. Due to the relatively small number of samples analyzed in this sector, this anomalous sample would skew the data.

Figure 3 presents the average primary material composition for single family residential garbage not including the outlier sample. The largest component was organics (34.6%), followed by household hygiene (32.3%), and plastic (8.4%). Organics mainly comprised food waste (27.2%), of which 19.2% was avoidable (i.e., edible) and 8.0% was unavoidable (i.e., inedible parts of food). Plastic mainly comprised non-recyclable durable plastic products, (2.8%).

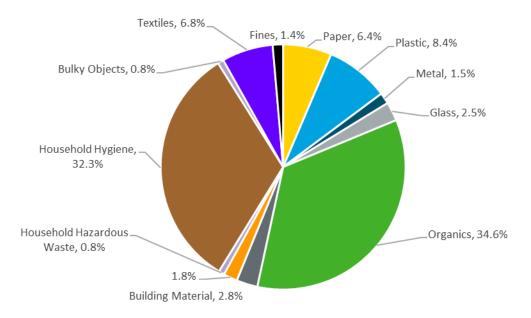


Figure 3: Primary Category Composition – Single Family Residential Garbage (N=6)

Squamish is undergoing rapid population growth and might be expected to have more building materials than average in the garbage. With this understanding, a second graph with results from all samples, including the outlier, is provided on Figure 4.

When all SF residential samples are included, the largest component was organics (32.6%), followed by household hygiene (30.1%), building material (7.9%), and plastic (7.8%).



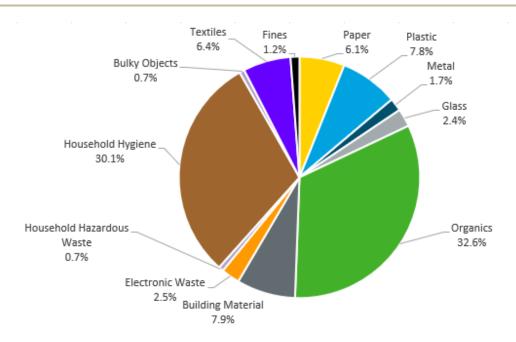


Figure 4: Primary Category Composition - Single Family Residential Garbage (N=7) Including Outlier

# 3.3 Multi-Family Residential

Figure 5 presents the average primary material composition for MF residential garbage. The largest component was organics (48.0%), followed by household hygiene (19.2%), paper (8.9%), and plastic (8.2%). Organics mainly comprised food waste (42.6%), of which 25.0% was avoidable (i.e., edible) and 17.6% was unavoidable (i.e., inedible parts of food). Paper mainly comprised recyclable paper (4.5%) and compostable paper (3.8%). Plastic mainly comprised recyclable rigid packaging (2.5%).

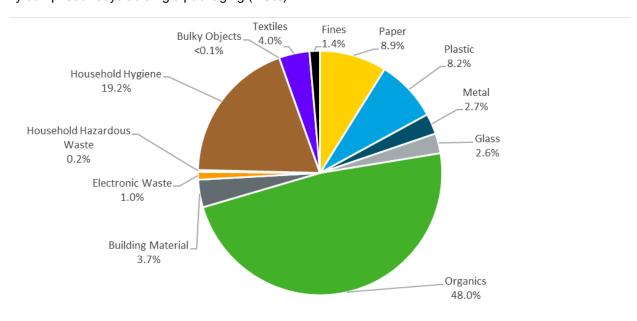


Figure 5: Primary Category Composition – Multi-Family Residential Garbage (N=5)



#### 3.4 Industrial, Commercial, and Institutional

Figure 6 presents the average primary material composition for ICI garbage. The largest component was organics (42.8%), followed by paper (21.0%), and plastic (12.9%). Organics mainly comprised food waste (36.3%), of which 25.2% was avoidable (i.e., edible) and 11.1% was unavoidable (i.e., inedible parts of food). Paper mainly comprised compostable paper (i.e., napkins and tissue paper) (11.3%) and plastic mainly comprised non-recyclable durable products (3.6%) and recyclable rigid packaging (3.4%).

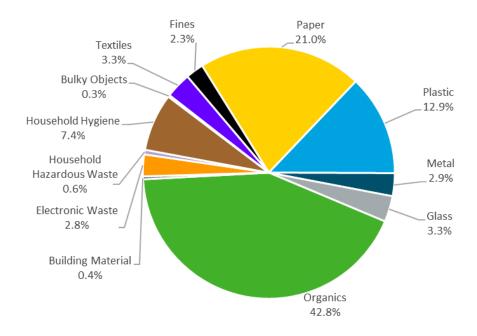


Figure 6: Primary Category Composition – ICI Garbage (N=8)

#### 3.5 Construction and Demolition

Figure 7 presents the average primary material composition for C&D garbage. The largest component was organics (80.3%), followed by building material (13.8%). Organics within the C&D sector comprised entirely of wood, which includes compostable and non-compostable wood types, was further separated by potential processing or disposal destination. Co-generation wood (42.7%) was the largest component, followed by compostable wood (22.4%), and landfill wood (15.2%). Building material comprised mostly other inorganics (12.4%), which included flooring, roofing, and siding products. Definitions for wood waste categories are included in Appendix B and also denoted below:

- Compostable Wood (currently disposed as co-generation wood) Pallets, dimensional lumber (no paint, no treatment)
- Co-generation Wood Plywood, gluelam, flakeboard, lightly stained or painted wood
- Landfill Wood Treated, heavily painted or stained, composites, or contains large amounts of other materials





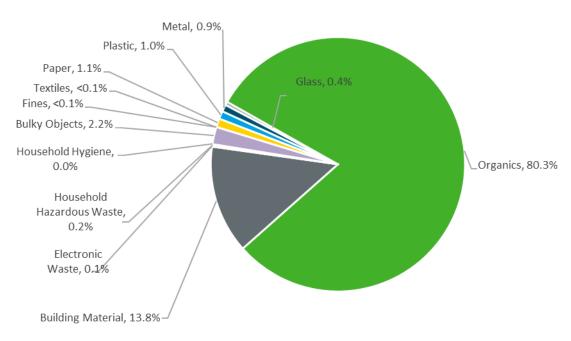


Figure 7: Primary Category Composition – C&D Garbage (N=7)

# 3.6 Comparison of 2016 and 2018 Waste Audit Data

A by-sector comparison of waste audit results between 2016 and 2018 is presented on Figure 8.

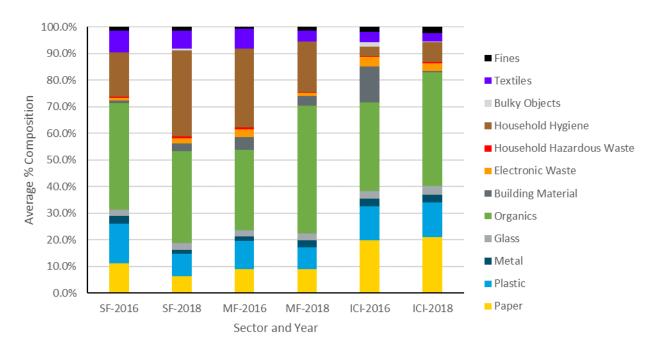


Figure 8: Comparison of Primary Category Composition between 2016 and 2018



While there were some changes in the average composition of primary material categories, in most cases, the sample variation was greater than the difference in composition. T-tests were conducted on the 2016 and 2018 data to determine if there were any differences that would be considered significant (p-value < 0.05).

**SF Residential** - Paper, plastic, and organics were significantly lower in 2018 in the SF residential sector compared to 2016 whereas household hygiene was significantly higher. Paper decreased from 11.2% to 6.4%, plastics decreased from 15.0% to 8.4%, and organics decreased from 40.1% to 34.6%. Household hygiene increased from 16.6% to 32.3%. This difference could be an indicator of increased recycling and composting; as more divertable materials are removed from garbage, the relative proportion of residual waste such as household hygiene items increases. Furthermore, normally the quantity of organics increases in the summer months, so a decrease could indicate that more materials are being diverted.

**MF Residential** - Metal and organics were higher in 2018 in the MF residential sector compared to 2016. Metal increased from 1.7% to 2.7% and organics increased from 30.3% to 48.0%. However, given the limited number of loads available for sampling per week, there were only four samples in 2016 and five in 2018 were sampled. Therefore, the results should be interpreted with an understanding that statistical analyses are less robust with small numbers of samples. A large portion of the organics observed was unavoidable food waste such as corn husks and watermelon rinds, which are more common in the summer. Therefore, seasonal differences may be the primary driver for the change.

**ICI** - As per the T-test, no significant differences were seen in the ICI sector for primary material categories. The level of variation in the ICI sector is the highest due to the different types of waste created by different types of businesses.

### 3.7 Extended Producer Responsibility Results

Results by primary category for the concurrent extended producer responsibility (EPR) characterization study conducted in partnership with SABC are presented in Table 2. Category definitions are included in Appendix C. EPR items make up approximately 12.2% to 23.9% of the waste stream. The highest amount of EPR items were found in the ICI sector, with over half due to Recycle BC packaging which does not currently include ICI sector. In general, packaging (7.0% to 14.5%) was the largest category of EPR items, followed by printed paper (0.8% to 2.7%), and beverage containers (returnable to Encorp) (0.7% to 2.6%).

Table 2: Composition of Extended Producer Responsibility Items by Sector

Primary Category	SF	MF	ICI
BDL Beverage Containers	<0.1%	0.2%	0.2%
BDL Packaging	<0.1%	<0.1%	0.2%
BDL/Encorp Pacific Beverage Containers	<0.1%	<0.1%	0.5%
Encorp Beverage Containers	0.7%	1.2%	2.6%
Newsprint	<0.1%	0.5%	0.1%
Other Printed Paper	1.8%	0.8%	2.7%
RecycleBC Packaging	7.0%	11.2%	14.5%
Tires	0.2%	<0.1%	<0.1%
Oil and Antifreeze	<0.1%	<0.1%	<0.1%
Lead-Acid Batteries	<0.1%	<0.1%	<0.1%
Single Use/Rechargeable < 5 kg	<0.1%	<0.1%	<0.1%
Paint/Pesticides/Solvents/Gasoline	0.1%	<0.1%	<0.1%
Lighting Equipment	<0.1%	<0.1%	<0.1%
Alarms	<0.1%	<0.1%	<0.1%





Primary Category	SF	MF	ICI
Electronics	0.5%	0.5%	2.6%
Mobile Devices	<0.1%	<0.1%	<0.1%
Heating/Ventilation/Air Conditioning/Refrigeration/Plumbing Products	1.0%	<0.1%	<0.1%
Thermostats	<0.1%	<0.1%	<0.1%
Outdoor Power Equipment	0.4%	<0.1%	<0.1%
Small Appliances and Power Tools	<0.1%	0.5%	0.2%
Major Household Appliances	<0.1%	<0.1%	<0.1%
Medications	0.1%	<0.1%	0.1%
EPR Products Subtotal	12.2%	15.1%	23.9%
Non-EPR Products	87.8%	84.9%	76.1%
Total	100.0%	100.0%	100.0%

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We trust this technical memo meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted, Tetra Tech Canada Inc.

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# APPENDIX A

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# LIMITATIONS ON USE OF THIS DOCUMENT

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# APPENDIX B

### **WASTE AUDIT CATEGORIES**





Category	Description	Diversion Potential
1 Paper - Refundable	Tetrapaks, bottle deposit	Depot/Drop-off
2 Paper - Recyclable	Fine, office, magazines, cardboard, coffee cups	Curbside Recyclable
3 Paper - Compostable	Food-soiled paper, pizza boxes, paper towels	Curbside Compostable
4 Paper - Other/Non-Recycle BC	Non-recyclable, books, tar paper, composites	Residual
5 Plastic - Refundable	Bottle deposit plastic	Depot/Drop-off
6 Plastic - Rigid Packaging	#1-7, uncoded, excludes styrofoam	Curbside Recyclable
7 Plastic - Durable Products	Non-packaging such as tapes, toys, straws, cutlery, household objects	Residual
8 Plastic - Styrofoam	Styrofoam	Depot/Drop-off
9A Plastic - Film Packaging	Retail bags and wrap	Depot/Drop-off
9B Plastic - Flex Packaging	Ziploc bags, chip bags, stand-up bags	Depot/Drop-off
10 Plastic - Film Products	Non-packaging such as tarps, pallet wrap	Residual
11 Metal - Refundable	Bottle deposit metal	Depot/Drop-off
12 Metal - Recyclable	Metal containers	Curbside Recyclable
13 Metal - Non-Recycle BC	Metal objects	Depot/Drop-off
14 Glass - Refundable	Bottle deposit glass	Depot/Drop-off
15 Glass - Recyclable	Glass containers	Depot/Drop-off
16 Glass - Non-Recycle BC	Glass and ceramic objects	Residual
17 Organics - Yard Waste	Yard trimmings, manure	Curbside Compostable
18 Organics - Avoidable Food Waste	Food that could have been eaten	Curbside Compostable
19 Organics - Unavoidable Food Waste	Peelings, bones, coffee grounds, shells	Curbside Compostable
20 Organics - Non-Compostable	Leather, rubber, wax - non-clothing, non-hygiene, biodegradable/compostable plastics	Residual
21 Organics - Compostable Wood	Pallets, dimensional lumber (no paint, no treatment)	Cogen
22 Organics - Co-gen Wood	Plywood, gluelam, flakeboard, lightly stained or painted wood	Cogen
23 Organics - Landfill Wood	Treated, heavily painted or stained, composites, or contains large amounts of other materials	Residual
24 Building Material	Construction material - carpet, gypsum, asphalt, insulation, aggregate	Depot/Drop-off
24A Building Material - gypsum/drywall plaster <sup>1</sup>	Gypsum and drywall	Depot/Drop-off
24B Building Material - Masonry (bricks, blocks, concrete, etc.) <sup>1</sup>	All masonry products	Depot/Drop-off
24C Building Material - Rock, sand, dirt, ceramic, porcelain <sup>1</sup>	All aggregate materials, ceramic tiles, porcelain finishes	Depot/Drop-off



24D Building Material - Rigid asphalt products <sup>1</sup>	All types of asphalt	Depot/Drop-off
24E Building Material - Carpet waste (and underlay) <sup>1</sup>	All types of carpets and underlay	Depot/Drop-off
24F Building Material - Other inorganics (linoleum, etc.) <sup>1</sup>	Other building materials not included in categories above such as flooring, roofing, and siding products	Depot/Drop-off
25 Electronic Waste	Anything with a cord or battery operated	Depot/Drop-off
26 Household Hazardous Waste – EPR	Batteries, products, mercury containing, paints, oil	Depot/Drop-off
27 Household Hazardous Waste - Non-EPR	Sharps, glues, caulking	Residual
28 Household Hygiene	Diapers, hygiene products, personal care, pet waste	Residual
29 Bulky Objects	Furniture, appliances, mattresses	Depot/Drop-off
30 Textiles	Clothing, linens, bags, shoes	Depot/Drop-off
31 Fines	<1" size	Residual

<sup>&</sup>lt;sup>1</sup>Only used for C&D audits.



# APPENDIX C

### **EXTENDED PRODUCER RESPONSIBILITY CATEGORIES**





Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
BDL	001	BDL Beverage Containers	I	BDL Bev	Mass	
BDL	002	BDL Beverage Containers	BDL Bev	Aluminum can	Count	Alcohol only.
BDL	003	BDL Beverage Containers	BDL Bev	Non-aluminum can	Count	Alcohol only.
BDL	004	BDL Packaging	BDI	_ Packaging	Mass	
BDL	005	BDL Packaging	BDL Packaging	Old corrugated cardboard (beer)	Yes / No	Beer/cider packaging only.
BDL	006	BDL Packaging	BDL Packaging	Old boxboard (beer)	Yes/ No	Beer/cider packaging only.
BDL/ Encorp	007	BDL/Encorp Pacific Beverage Containers	BDL	/Encorp Bev	Mass	
BDL/ Encorp	800	BDL/Encorp Pacific Beverage Containers	BDL/Encorp Bev	Glass 0 to 1 L (beer and cider)	Count	Alcohol only. Do not include non- alcoholic beverages in similar packaging (e.g., sodas). Take one photo of all items in this category per sample for documentation.
Encorp Pacific	009	Encorp Beverage Containers	Encorp Bev		Mass	
Encorp Pacific	010	Encorp Beverage Containers	Encorp Bev	Drink box 0 to 500 mL	Count	Only for beverages. No dairy or dairy substitutes.
Encorp Pacific	011	Encorp Beverage Containers	Encorp Bev	Drink box 501 mL to 1 L	Count	Only for beverages. No dairy or dairy substitutes.
Encorp Pacific	012	Encorp Beverage Containers	Encorp Bev	Gable-top 0 to 500 mL	Count	Only for beverages. No dairy or dairy substitutes.
Encorp Pacific	013	Encorp Beverage Containers	Encorp Bev	Gable-top 501 mL to 1 L	Count	Only for beverages. No dairy or dairy substitutes.
Encorp Pacific	014	Encorp Beverage Containers	Encorp Bev	Gable-top > 1 L	Count	Only for beverages. No dairy or dairy substitutes.
Encorp Pacific	015	Encorp Beverage Containers	Encorp Bev	Drink box (wine)	Count	Wine only.
Encorp Pacific	016	Encorp Beverage Containers	Encorp Bev	Bag in a box (wine)	Count	Wine only.
Encorp Pacific	017	Encorp Beverage Containers	Encorp Bev	Plastic 0 to 1 L (alcohol)	Count	Alcohol only.
Encorp Pacific	018	Encorp Beverage Containers	Encorp Bev	Plastic > 1 L (alcohol)	Count	Alcohol only.
Encorp Pacific	019	Encorp Beverage Containers	Encorp Bev	Plastic drink pouches	Count	Only for beverages. No dairy or dairy substitutes.
Encorp Pacific	020	Encorp Beverage Containers	Encorp Bev	Plastic 0 to 1 L (non-alcohol)	Count	Only for beverages. No dairy or dairy substitutes.



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
Encorp Pacific	021	Encorp Beverage Containers	Encorp Bev	Plastic > 1 L (non-alcohol)	Count	Only for beverages. No dairy or dairy substitutes.
Encorp Pacific	022	Encorp Beverage Containers	Encorp Bev	Bi-metal 0 to 1 L	Count	Only for beverages. No dairy or dairy substitutes.
Encorp Pacific	023	Encorp Beverage Containers	Encorp Bev	Bi-metal > 1 L	Count	Only for beverages. No dairy or dairy substitutes.
Encorp Pacific	024	Encorp Beverage Containers	Encorp Bev	Glass > 1 L (beer and cider)	Count	Alcohol only. Do not include non- alcoholic beverages in similar packaging (e.g., sodas).
Encorp Pacific	025	Encorp Beverage Containers	Encorp Bev	Glass 0 to L (wine and spirits)	Count	Alcohol only. Do not include non- alcoholic beverages in similar packaging (e.g., sparkling juices).
Encorp Pacific	026	Encorp Beverage Containers	Encorp Bev	Glass > 1 L (wine and spirits)	Count	Alcohol only. Do not include non- alcoholic beverages in similar packaging (e.g., sparkling juices).
Encorp Pacific	027	Encorp Beverage Containers	Encorp Bev	Glass 0 to 1 L (non-alcohol)	Count	Only for beverages. No dairy or dairy substitutes.
Encorp Pacific	028	Encorp Beverage Containers	Encorp Bev	Glass > 1 L (non-alcohol)	Count	Only for beverages. No dairy or dairy substitutes.
Recycle BC	029	Newsprint	1	Newsprint	Mass	
Recycle BC	030	Newsprint	Newsprint	Newspapers	Yes/ No	Daily and weekly newspapers, community newspapers, free newspapers and other newsprint publications. e.g. Globe and Mail, Star, Metro, Auto Trader, Condo Living, Real Estate News.
Recycle BC	031	Newsprint	Newsprint	Newsprint flyers and inserts	Yes/ No	Newsprint flyers and advertising distributed to households.
Recycle BC	032	Other Printed Paper		Other PP	Mass	
Recycle BC	033	Other Printed Paper	Other PP	Magazines and catalogues	Yes/ No	Glossy magazines, catalogues, calendars, annual reports (i.e. stapled or glued).
Recycle BC	034	Other Printed Paper	Other PP	Directories and telephone books	Yes/ No	Telephone books and other directories such as the Yellow Pages.
Recycle BC	035	Other Printed Paper	Other PP	Other printed paper	Yes/ No	Writing paper, office paper, paper envelopes, calendars (purchased or promotional), bills and statements, ad mail, nonnewsprint flyers and advertising and gift cards, non-foil gift wrap, cash register receipts, lottery tickets, posters, promotional postcards, sketch pads, notebooks.  DO NOT INCLUDE: Soft or hard



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
						covered books and bound periodicals, reference books, literary and text books, and academic journals.
Recycle BC	036	RecycleBC Packaging	Recycl	eBC Packaging	Mass	
Recycle BC	037	RecycleBC Packaging	RecycleBC Packaging	Gable-top containers	Yes/ No	Polycoat containers with a gable shaped top commonly used for milk and milk substitutes like soy, almond and rice milk, some foods, sugar, molasses, etc.
Recycle BC	038	RecycleBC Packaging	RecycleBC Packaging	Aseptic containers	Yes/ No	Polycoat fibre and foil containers (e.g. Tetra Pak) commonly used for milk and milk substitutes like soy, almond and rice milk, soup, sauces, etc.
Recycle BC	039	RecycleBC Packaging	RecycleBC Packaging	Polycoat cups	Yes/ No	Hot beverage/food containers, with polycoat on inside only, including coffee cups, soup cups/bowls, chili cups etc. Cold beverage/food containers with polycoat on both sides including fountain drinks, take-out ice cream cups.
Recycle BC	040	RecycleBC Packaging	RecycleBC Packaging	Polycoat containers	Yes/ No	Polycoat paper ice cream containers, typically with a lid, excluding boxboard folder ice cream boxes. Food containers with white fibre and a rolled or folded rim, such as Michelina's frozen food, KFC tubs.
Recycle BC	041	RecycleBC Packaging	RecycleBC Packaging	Paper laminate packaging and waxed corrugated cardboard	Yes/ No	Paper with aluminum foil, paper with plastic, multi-layered paper. Microwave popcorn bags, some cookie bags, dog food bags, paper granola bar wrappers, laminated paper carry out bags, bags with bonded plastic or foil liners/layers/coatings. Waxed corrugated cardboard.
Recycle BC	042	RecycleBC Packaging	RecycleBC Packaging	Old corrugated cardboard (non- beer)	Yes/ No	Micro-flute corrugated containers, pizza boxes, electronic product boxes such as television and computer boxes, boxes used to direct mail for residential consumers.  Kraft paper bags and wrap, grocery or retail bags, potato bags, some pet food bags, including brown, white, and coloured kraft paper and bags.



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
Recycle BC	043	RecycleBC Packaging	RecycleBC Packaging	Boxboard/cores/mol ded pulp (non-beer)	Yes/ No	Boxboard, paperboard commonly used for cereal boxes, shoe boxes, frozen food boxes, fast food and ice cream boxes, cartons such as fry/onion ring boxes, carrier boxes for soft drink containers. Cores from toilet paper/ paper towels/ gift wrap, etc. Molded pulp packaging commonly used for egg cartons, drink trays, other trays, molded pulp flower pots/trays, etc.
Recycle BC	044	RecycleBC Packaging	RecycleBC Packaging	#1 PET bottles and jars	Yes/ No	#1 plastic bottles and jars commonly used for milk and milk substitutes, cooking oil, honey, dish soap, nuts, etc.
Recycle BC	045	RecycleBC Packaging	RecycleBC Packaging	#1 PET thermoform	Yes/ No	#1 clamshells commonly used for bakery trays; pre-made fruit and salad packages. #1 egg cartons. #1 trays commonly used for single serve meals; deli and bakery items; house wares and hardware products. #1 cold drink cups.
Recycle BC	046	RecycleBC Packaging	RecycleBC Packaging	#2 HDPE bottles/jugs/containe rs	Yes/ No	#2 plastic bottles and jugs commonly used for juice concentrate, milk and milk substitutes, laundry soap, shampoo, windshield washer fluid, personal care products, pharmaceuticals, vitamin and supplements containers.
Recycle BC	047	RecycleBC Packaging	RecycleBC Packaging	#5 PP bottles/jugs/jars	Yes/ No	# 5 plastic bottles includes nutritional supplement drinks, shampoos, etc. NO TUBS
Recycle BC	048	RecycleBC Packaging	RecycleBC Packaging	Other rigid plastic packaging	Yes/ No	#7 rigid containers. #2, #3, #4, #5, #6 (non-expanded) trays, pails, tubs and lids not listed in other categories. Rigid containers without SPI resin code.
Recycle BC	049	RecycleBC Packaging	RecycleBC Packaging	#6 PS expanded polystyrene	Yes/ No	White and coloured. #6 foam take-out containers such as drink cups, egg cartons, take-out food clamshells, white packaging foam, coloured meat trays, etc.
Recycle BC	050	RecycleBC Packaging	RecycleBC Packaging	Film plastic (LDPE and HDPE packaging)	Yes/ No	#2 HDPE & #4 LDPE film, dry cleaning bags, bread bags, frozen food bags, milk bags, toilet paper and paper towel over-wrap, lawn seed bags, grocery and retail carry-out bags. DO NOT INCLUDE: Garbage bags, kitchen catchers, Ziploc bags.



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
Recycle BC	051	RecycleBC Packaging	RecycleBC Packaging	Plastic laminate packaging	Yes/ No	Laminated plastic film and bags including chip bags, vacuum sealed bags, cereal liners, candy wraps, pasta bags, boil in a bag, plastic based food pouches. Film plastic other than #2 HDPE and #4LDPE including PLA, PHA, PHB. Other plastic packaging not listed in other categories. PE foam packaging. Blister packaging. PS foam peanut packaging.
Recycle BC	052	RecycleBC Packaging	RecycleBC Packaging	Steel food containers	Yes/ No	Steel food cans commonly used for soups, beans, peaches, etc. Bi-metal and spiral wound cans.
Recycle BC	053	RecycleBC Packaging	RecycleBC Packaging	Steel aerosol containers	Yes/ No	Empty food and consumer product spray cans commonly used for cooking oil, whipped cream, etc.
Recycle BC	054	RecycleBC Packaging	RecycleBC Packaging	Aluminum food containers	Yes/ No	Aluminum food cans commonly used for sardines and cat food, etc.
Recycle BC	055	RecycleBC Packaging	RecycleBC Packaging	Aluminum foil and foil trays	Yes/ No	Aluminum foil wrap, pie plates, baking trays, etc.
Recycle BC	056	RecycleBC Packaging	RecycleBC Packaging	Aluminum aerosol containers	Yes/ No	Aluminum aerosol containers commonly used for hair products, etc.
Recycle BC	057	RecycleBC Packaging	RecycleBC Packaging	Glass containers	Yes/ No	Clear and coloured. Food containers commonly used for pickles, salsa, cosmetics, cooking oil, vinegar.
TSBC	058	Tires		Tires	Mass	
TSBC	059	Tires	Tires	Passenger and light truck	Count	Report all other tires to TSBC.
TSBC	060	Tires	Tires	Medium truck	Count	Report all other tires to TSBC.
TSBC	061	Tires	Tires	Agricultural	Count	Report all other tires to TSBC.
TSBC	062	Tires	Tires	Logger skidder	Count	Report all other tires to TSBC.
TSBC	063	Tires	Tires	Bicycle tires and tubes	Count	Report all other tires to TSBC.
TSBC	064	Tires	Tires	Other tires	Count	Report all other tires to TSBC.
BCUOM A	065	Oil and Antifreeze	Oil	/Antifreeze	Mass	
BCUOM A	066	Oil and Antifreeze	Oil/Antifreez e	Lubricating oil	Count	Containers with product inside.
BCUOM A	067	Oil and Antifreeze	Oil/Antifreez e	Lubricating oil containers	Count	Empty containers only.



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
BCUOM A	068	Oil and Antifreeze	Oil/Antifreez e	Lubricating oil filters	Count	
BCUOM A	069	Oil and Antifreeze	Oil/Antifreez e	Antifreeze	Count	Containers with product inside.
BCUOM A	070	Oil and Antifreeze	Oil/Antifreez e	Antifreeze containers	Count	Empty containers only.
CBA	071	Lead-Acid Batteries	Lead-	Acid Batteries	Mass	
СВА	072	Lead-Acid Batteries	Lead-Acid Batteries	Lead-acid batteries	Count	Photograph all lead-acid batteries and drop at recycling location.
Call2 Recycle	073	Single Use/ Rechargeable < 5 kg	SU	/R Batteries	Mass	
Call2 Recycle	074	Single Use/ Rechargeable < 5 kg	SU/R Batteries	Rechargeable batteries < 5 kg	Count	Nickel Cadmium, Lithium-Ion, Nickel Metal Hydride, Nickel Zinc. Return all batteries to Call2Reycle for further analysis.
Call2 Recycle	075	Single Use/ Rechargeable < 5 kg	SU/R Batteries	Primary/single use batteries < 5 kg	Count	Alkaline and Lithium. Return all batteries to Call2Reycle for further analysis.
Product Care	076	Paint/Pesticides/ Solvents/Gasoline		PPGS	Mass	
Product Care	077	Paint/Pesticides/ Solvents/Gasoline	PPGS	Flammable liquids	Count	Must have a flame symbol or phrase similar to "keep away from open spark or flame" on the label, e.g. paint thinners, camping fuel, kerosene etc.
Product Care	078	Paint/Pesticides/ Solvents/Gasoline	PPGS	Gasoline	Count	
Product Care	079	Paint/Pesticides/ Solvents/Gasoline	PPGS	Paint/coatings	Count	Containers with product interior & exterior, latex and oil based, consumer products only, non-industrial.
Product Care	080	Paint/Pesticides/ Solvents/Gasoline	PPGS	Paint containers	Count	Empty containers only.
Product Care	081	Paint/Pesticides/ Solvents/Gasoline	PPGS	Aerosol paint	Count	Containers with product all types including automotive and industrial.
Product Care	082	Paint/Pesticides/ Solvents/Gasoline	PPGS	Aerosol paint containers	Count	Empty containers only - all types including automotive and industrial.
Product Care	083	Paint/Pesticides/ Solvents/Gasoline	PPGS	Domestic pesticides	Count	Consumer pesticides that have both the poisonous (skull & cross bones) symbol and Pest Control Product (PCP) number.
Product Care	084	Lighting Equipment		Lighting	Mass	



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
Product Care	085	Lighting Equipment	Lighting	Lights and lamps	Count	All bulb and tube technologies. e.g. CFLs, fluorescent tubes, incandescent bulbs, etc.
Product Care	086	Lighting Equipment	Lighting	Lighting fixtures	ctures Count Examples: Table lamp, chandelier, flashlight, war etc.	
Product Care	087	Lighting Equipment	Lighting	Lighting ballasts	Count	
Product Care	088	Alarms		Alarms	Mass	
Product Care	089	Alarms	Alarms	Smoke alarms	Count	
Product Care	090	Alarms	Alarms	Carbon monoxide alarms	Count	
EPRA	091	Electronics	E	lectronics	Mass	
EPRA	092	Electronics	Electronics	Desktop computers and servers	Count	
EPRA	093	Electronics	Electronics	Notebook and laptop computers	Count	Portable computers, excludes handheld devices.
EPRA	094	Electronics	Electronics			Including but not limited to mouse, keyboard, external hard drives.
EPRA	095	Electronics	Electronics	Computer monitors	Count	
EPRA	096	Electronics	Electronics	Desktop printers/scanners/ copiers/ fax machines	Count	Desktop devices only.
EPRA	097	Electronics	Electronics	Handheld computing devices	Count	Examples: tablets, ebook readers.
EPRA	098	Electronics	Electronics	Floor standing printers/ scanners/copiers	nters/	
EPRA	099	Electronics	Electronics	Televisions	Count	
EPRA	100	Electronics	Electronics	audio/video equipment sets, cameras and v recorders designed professional use, pro audio players, record headphones, microp amplifiers, equalizer speakers, DVD play boxes. DO NOT INC		Including, without limitation, radio sets, cameras and video recorders designed for non-professional use, projectors, audio players, recorders, headphones, microphones, amplifiers, equalizers and speakers, DVD players, cable boxes. DO NOT INCLUDE PROFESSIONAL EQUIPMENT.
EPRA	101	Electronics	Electronics	Other audio/video equipment		



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
EPRA	102	Electronics	Electronics	Non-cellular telephones/ answering systems	Count	Corded and cordless telephones and answering systems for consumer use.
EPRA	103	Electronics	Electronics	Commercial telephones/ telecommunications equipment	Count	Corded and cordless telephones, answering systems, telecommunications equipment for commercial use such as office phone systems and, teleconferencing systems.
EPRA	104	Electronics	Electronics	Electric typewriters/telex/ computer terminals	Count	Electric typewriters, telex machines, computer terminals or systems. DO NOT INCLUDE DESKTOP COMPUTERS.
EPRA	105	Electronics	Electronics	Pocket and desk calculators	Count	
EPRA	106	Electronics	Electronics	Network and telecommunications equipment	Count	Examples: modems, switches, routers.
EPRA	107	Electronics	Electronics	Storage devices and media	Count	Devices, equipment or media for collecting, storing, processing, presenting or communicating information, including, without limitation, sounds and images.
EPRA	108	Electronics	Electronics	Other electronics	Count	Other electronic or electrical information technology or telecommunication devices, equipment or media not listed in other categories.
EPRA	109	Electronics	Electronics	Electronic musical instruments and equipment	Count	
EPRA	110	Electronics	Electronics	Electronic medical equipment	Count	
EPRA	111	Electronics	Electronics	Monitoring and control instruments	Count	Electronic or electrical monitoring and control instruments, including, alarm systems, devices for measuring, weighing or adjusting, but not including thermostats or smoke detectors.
EPRA	112	Electronics	Electronics	Electric toys (ride on)	Count	
EPRA	113	Electronics	Electronics	Electric toys (non- ride on)	Count	
Recycle My Cell	114	Mobile Devices	Mol	bile Devices	Mass	
Recycle My Cell	115	Mobile Devices	Mobile Devices	Mobile devices	Count	Mobile devices designed primarily to connect to a cellular or paging network, including, without limitation, mobile phones,



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
						smartphones (iPhone, android, blackberry etc.), cellular personal digital assistants and pagers
HRAI	116	Heating/Ventilatio n/ Air Conditioning/ Refrigeration/ Plumbing Products	HVAC/Refrig/Plumb		Mass	
HRAI	117	Heating/Ventilatio n/ Air Conditioning/ Refrigeration/ Plumbing Products	HVAC/Refri g/ Plumb	Heating products	Count	Examples: residential furnaces (all types), commercial furnaces (all types), residential boilers (all types), commercial boilers (all types), unit heaters (all types), heat pumps, direct heating equipment, infrared heaters, commercial-industrial forced-air heating equipment
HRAI	118	Heating/Ventilatio n/ Air Conditioning/ Refrigeration/ Plumbing Products	HVAC/Refri g/ Plumb	Cooling products	Count	Examples: residential condenser units, commercial-industrial forced-air heating equipment, HP/AC ductless coils, electrical horizontal single package cooling electrical, gas/electrical single package heat and cool, split system condensing units, geothermal heat pumps, watersource heat pumps, packaged terminal products, automatic commercial ice makers, mobile refrigeration equipment, datacom cooling, chilled beams, humidifiers, dehumidifiers, heat pump pool and spa heaters, thermal storage
HRAI	119	Heating/Ventilatio n/ Air Conditioning/ Refrigeration/ Plumbing Products	HVAC/Refri g/ Plumb	Chillers	Count	
HRAI	120	Heating/Ventilatio n/ Air Conditioning/ Refrigeration/ Plumbing Products	HVAC/Refri g/ Plumb			Examples: commercial freezers, commercial coolers, commercial refrigerators, display cases, reach-ins, walk-ins
HRAI	121	Heating/Ventilatio n/ Air Conditioning/ Refrigeration/ Plumbing Products	HVAC/Refri g/ Plumb	Plumbing	Count	Examples: Water heaters with a tank, tankless water heaters, fluid pumps, water softeners, UV disinfection systems, hydronic systems and control



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
HRAI	122	Thermostats	Th	nermostats	Mass	
HRAI	123	Thermostats	Thermostats	Thermostats (non- mercury containing)	Count	
HRAI	124	Thermostats	Thermostats	stats Other thermostats		
OPEIC	125	Outdoor Power Equipment	Ou	t Pwr Equip	Mass	
OPEIC	126	Outdoor Power Equipment	Out Pwr Equip	· ·		Hand-held, walk-behind and free- standing electric outdoor power equipment, e.g. chain saw, lawn mower, pressure washer, snowblower, etc.
CESA	127	Small Appliances and Power Tools	Sm	Appl and PT	Mass	
CESA	128	Small Appliances and Power Tools	Sm Appl and PT	Full size floor and carpet care appliances	Count	
CESA	129	Small Appliances and Power Tools	Sm Appl and PT	Smaller floor/surface cleaning appliances		
CESA	130	Small Appliances and Power Tools	Sm Appl and PT	Garment care Count appliances		Including, without limitation, irons and garment steamers.
CESA	131	Small Appliances and Power Tools	Sm Appl and PT	Kitchen countertop - motorized appliances	Count	
CESA	132	Small Appliances and Power Tools	Sm Appl and PT	Kitchen countertop - heating appliances (non-coffee/tea)	Count	
CESA	133	Small Appliances and Power Tools	Sm Appl and PT	Kitchen countertop - heating appliances (coffee/tea)	Count	
CESA	134	Small Appliances and Power Tools	Sm Appl and PT	Time measurement and display devices	Count	
CESA	135	Small Appliances and Power Tools	Sm Appl and PT	Personal care appliances	<b>O</b> ,	
CESA	136	Small Appliances and Power Tools	Sm Appl and PT	Weight measurement	Count	
CESA	137	Small Appliances and Power Tools	Sm Appl and PT	Air treatment appliances	Count	
CESA	138	Small Appliances and Power Tools	Sm Appl and PT	Desk and tabletop fans	Count	
CESA	139	Small Appliances and Power Tools	Sm Appl and PT	Microwaves	Count	
CESA	140	Small Appliances and Power Tools	Sm Appl and PT	Test and measurement tools	Count	



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
CESA	141	Small Appliances and Power Tools	Sm Appl and PT	Handheld power tools	Count	
CESA	142	Small Appliances and Power Tools	Sm Appl and PT	Bench- top/demolition/ free-standing power tools	Count	
CESA	143	Small Appliances and Power Tools	Sm Appl and PT	Sewing/textile machines	Count	
CESA	144	Small Appliances and Power Tools	Sm Appl and PT	Designated very small items	Count	Examples: Stud finder, glue gun, bike speedometer, etc.
CESA	145	Small Appliances and Power Tools	Sm Appl and PT	Exercise machines	Count	Examples: Treadmill, elliptical, cycling machine, vibration machine, etc.
CESA	146	Small Appliances and Power Tools	Sm Appl and PT	Sports/leisure/arts/ crafts/hobby devices	Count	Examples: Inflator (for airbeds), mosquito lantern, laser caddie/sport rangefinder, airbrush, scrapbooking machines, mandrel, etc.
MARR	147	Major Household Appliances	M	lj HH Appl	Mass	
MARR	148	Major Household Appliances	Мј НН АррІ	Full size refrigerators/wine coolers/beverage centres	Count	
MARR	149	Major Household Appliances	Мј НН АррІ	Compact refrigerators/wine coolers/beverage centres	Count	
MARR	150	Major Household Appliances	Mj HH Appl	Freezers	Count	
MARR	151	Major Household Appliances	Mj HH Appl	Room air conditioners	Count	
MARR	152	Major Household Appliances	Mj HH Appl	Portable air conditioners	Count	
MARR	153	Major Household Appliances	Mj HH Appl	Dehumidifiers	Count	
MARR	154	Major Household Appliances	Mj HH Appl	Clothes washers	Count	
MARR	155	Major Household Appliances	Mj HH Appl	Clothes dryers	Count	
MARR	156	Major Household Appliances	Mj HH Appl	Ranges	Count	
MARR	157	Major Household Appliances	Мј НН АррІ	Range hoods and downdrafts	Count	
MARR	158	Major Household Appliances	Mj HH Appl	Built-in ovens	Count	



Steward	#	Primary	Primary Shorthand	Secondary	Meas ure	Description and Instructions
MARR	159	Major Household Appliances	Мј НН Аррі	Built-in and over the range microwave ovens	Count	
MARR	160	Major Household Appliances	Mj HH Appl	Surface cooking units	Count	
MARR	161	Major Household Appliances	Mj HH Appl	Dishwashers	Count	
MARR	162	Major Household Appliances	Mj HH Appl	Food waste disposers	Count	
MARR	163	Major Household Appliances	Mj HH Appl	Trash compactors	Count	
MARR	164	Major Household Appliances	Mj HH Appl	Electric water dispensers	Count	
HPSA	165	Medications	М	edications	Mass	
HPSA	166	Medications	Medications	Prescription drugs	Count	Product only. Send Medications to HPSA for destruction.
HPSA	167	Medications	Medications	Over-the-counter	Count	Product only. Send Medications to HPSA for destruction.
HPSA	168	Medications	Medications	Natural health products	Count	Product only. Send Medications to HPSA for destruction.
N/A	169	Non-EPR Products	Non-EPR		Not applic able	All other materials.



# APPENDIX D

### **DETAILED WASTE AUDIT RESULTS**





Category	SF	SF (including outlier)	MF	ICI	C&D
Number of Samples	6	7	5	8	7
1 Paper - Refundable	<0.1%	<0.1%	<0.1%	0.2%	<0.1%
2 Paper - Recyclable	3.3%	3.1%	4.5%	9.2%	1.1%
3 Paper - Compostable	2.8%	2.6%	3.8%	11.3%	<0.1%
4 Paper - Other/Non-Recycle BC	0.2%	0.3%	0.5%	0.2%	<0.1%
5 Plastic - Refundable	0.2%	0.2%	0.3%	0.6%	<0.1%
6 Plastic - Rigid Packaging	1.6%	1.5%	2.5%	3.4%	<0.1%
7 Plastic - Durable Products	2.8%	2.5%	1.7%	3.6%	0.5%
8 Plastic - Styrofoam	0.4%	0.4%	0.2%	0.4%	<0.1%
9A Plastic - Film Packaging	1.1%	1.1%	1.6%	2.1%	<0.1%
9B Plastic - Flex Packaging	1.4%	1.3%	1.5%	1.7%	<0.1%
10 Plastic - Film Products	0.9%	0.8%	0.4%	1.1%	0.5%
11 Metal - Refundable	0.2%	0.2%	0.4%	0.5%	<0.1%
12 Metal - Recyclable	0.6%	0.6%	1.3%	1.1%	<0.1%
13 Metal - Non-Recycle BC	0.7%	1.0%	1.0%	1.3%	0.9%
14 Glass - Refundable	0.2%	0.4%	0.8%	2.3%	<0.1%
15 Glass - Recyclable	1.0%	1.0%	1.1%	0.5%	<0.1%
16 Glass - Non-Recycle BC	1.3%	1.1%	0.7%	0.5%	0.4%
17 Organics - Yard Waste	0.5%	0.4%	1.9%	0.5%	<0.1%
18 Organics - Avoidable Food Waste	19.2%	17.9%	25.0%	25.2%	<0.1%
19 Organics - Unavoidable Food Waste	8.0%	7.6%	17.6%	11.1%	<0.1%
20 Organics - Non-Compostable	0.5%	0.4%	<0.1%	0.3%	<0.1%
21 Organics - Compostable Wood	1.5%	1.3%	0.1%	<0.1%	22.4%
22 Organics - Co-gen Wood	3.6%	3.8%	2.6%	5.6%	42.7%
23 Organics - Landfill Wood	1.4%	1.2%	0.8%	<0.1%	15.2%
24 Building Material	2.8%	7.9%	3.7%	0.4%	N/A
24A Building Material - gypsum/drywall plaster <sup>1</sup>	N/A	N/A	N/A	N/A	1.3%
24B Building Material - Masonry (bricks, blocks, concrete, etc.) <sup>1</sup>	N/A	N/A	N/A	N/A	<0.1%
24C Building Material - Rock, sand, dirt, ceramic, porcelain <sup>1</sup>	N/A	N/A	N/A	N/A	<0.1%
24D Building Material - Rigid asphalt products <sup>1</sup>	N/A	N/A	N/A	N/A	<0.1%
24E Building Material - Carpet waste (and underlay) <sup>1</sup>	N/A	N/A	N/A	N/A	<0.1%



Category	SF	SF (including outlier)	MF	ICI	C&D
24F Building Material - Other inorganics (linoleum, etc.) <sup>1</sup>	N/A	N/A	N/A	N/A	12.4%
25 Electronic Waste	1.8%	2.5%	1.0%	2.8%	0.1%
26 Household Hazardous Waste – EPR	0.4%	0.4%	0.1%	0.1%	0.2%
27 Household Hazardous Waste - Non-EPR	0.3%	0.3%	<0.1%	0.5%	<0.1%
28 Household Hygiene	32.3%	30.1%	19.2%	7.4%	<0.1%
29 Bulky Objects	0.8%	0.7%	<0.1%	0.3%	2.2%
30 Textiles	6.8%	6.4%	4.0%	3.3%	<0.1%
31 Fines	1.4%	1.2%	1.4%	2.3%	<0.1%

<sup>&</sup>lt;sup>1</sup>Only used for C&D audits.



# APPENDIX E

## **PHOTOGRAPHS**







Photo 1: Sorting set-up at District of Squamish Landfill



Photo 2: Sorting set-up at District of Squamish Landfill







**Photo 3: Single Family Residential Waste Sample** 



Photo 4: Multi Family Residential Waste Sample







Photo 5: Industrial, Commercial & Institutional Waste Sample



**Photo 6: Paper: Compostable** 





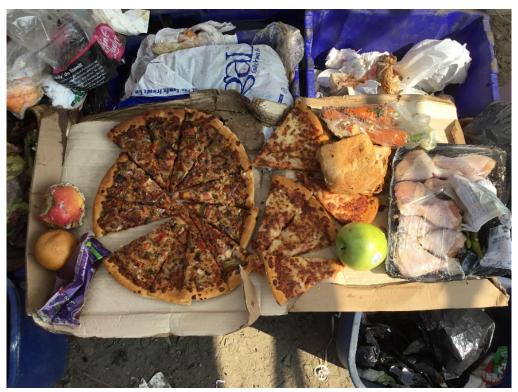


Photo 7: Organics -avoidable food waste



Photo 8: Organics: unavoidable food waste





Photo 9: Household Hygiene (Diapers)



Photo 10: Household Hazardous Waste (gas canister and electronics)







Photo 11: Truck dumping Construction and demolition load



Photo 12: Construction and demolition waste visual audit of load DLC-02







Photo 13: Truck 32 dumping Residential waste