

D4.4.12 Any proposed field activities (e.g., home visits, neighbourhood canvassing) shall be staffed by the Proponent and/or their Subconsultants.

D4.5 Waste Audits

- (a) Methodology shall be consistent with the CCME 1999 Recommended Waste Characterization Methodology for Direct Waste Analysis Studies in Canada or other comparable industry standards.
- (b) Each waste audit shall sample garbage, recycling, and food waste (if applicable) streams set out for collection from a minimum of 20 homes from each of the five pilot project routes for a minimum total of 100 homes per audit.
- (c) Waste audit material categories are included in Appendix A.
- (d) The City shall provide the following:
 - (i) An indoor sorting and storage area located at the BRRMF.
 - (ii) Garbage and recycling containers by the sorting area for final waste disposal.
 - (iii) Removal of waste from the sorting area after it has been sorted.
- (e) Hours of work:
 - (i) Work may take place during the BRRMF's public hours of operation. Hours of operation shall be confirmed by the Proponent prior to the beginning of each sampling event.
- (f) The Proponent shall be responsible for all remaining aspects of the work, including, but not limited to:
 - (i) Provision of all necessary tools, equipment, and training.
 - (ii) Cleaning and tidying of the sorting area at the end of each working day.
 - (iii) Providing the City at least two (2) weeks notice prior to the beginning of any proposed sampling period.
 - (iv) Complying with all site rules at the BRRMF (e.g. use of personal protective equipment, no smoking) and direction provided by City staff (e.g. Supervisor, Foremen, Traffic Directors) at the BRRMF.
- (g) Reporting on the waste audits shall be in accordance with D4.6.3.

D4.6 Reporting and Ongoing Evaluation

- (a) The Proponent shall continuously monitor data and resident feedback collected during the pilot project and provide a monthly status report to the Project Manager.
 - (i) Where significant events occur that may negatively affect the pilot project, the Proponent shall notify the Project Manager as soon as practical in order to jointly develop and implement a plan to mitigate or correct the issue.
- (b) The Proponent shall supply printed and bound copies of reports as follows:
 - (i) Final Report, five (5) copies
 - (ii) Waste Audits, three (3) copies of each audit
- (c) In addition to the required number of printed copies, all report shall be supplied digitally in Microsoft Word and Adobe PDF formats.
- (d) All charts within the Microsoft Word version of the Final Report shall have the underlying Microsoft Excel data table embedded into the document (i.e. charts copied from Microsoft Excel shall be pasted using "Keep Source Format & Embed Workbook").

D4.6.1 Interim Report

- (a) An interim report shall be developed that:
 - (i) Summarizes the implementation and current state of the pilot project to date;
 - (ii) Summarizes public engagement and data gathering activities;
 - (iii) Recommends potential improvements to the pilot project; and

- (iv) Recommends potential opportunities to modify garbage and recycling collection to support the pilot project.

D4.6.2 Final Report

- (a) The final report presenting the results of the RFW collection pilot project shall be developed to include the following:
 - (i) A plain language executive summary;
 - (ii) Summarization of the RFW collection pilot project plan and activities;
 - (iii) Results and discussion on the public engagement and data gathering activities; and,
 - (iv) Recommendations for the implementation of a City-wide RFW collection program, including discussion on barriers and opportunities.
- (b) The executive summary shall also be provided as a separate PDF file.
- (c) All other reports produced during the pilot project shall be attached as appendices.

D4.6.3 Waste Audit

- (a) A written report shall be required for each of the three waste audits and include, at minimum:
 - (i) Waste composition for each stream (garbage, recycling, organics)
 - (ii) Estimated per household and per capita waste generation
 - (iii) Capture rates for organic waste and recyclable material streams
 - (iv) Contamination rates for organic waste and recyclable material streams
 - (v) Comparison to previous audits
- (b) Notwithstanding the material categories identified in Appendix A, for reporting purposes the material categories shall be grouped into the following categories:
 - (i) Paper
 - (ii) Paper Packaging
 - (iii) Plastic Packaging
 - (iv) Metal
 - (v) Glass Containers
 - (vi) Household Special Waste
 - (vii) Food Waste
 - (viii) Pet Waste
 - (ix) Other Organics
 - (x) Diapers and Sanitary Products
 - (xi) Textiles
 - (xii) Renovation Waste
 - (xiii) Other Materials
- (c) The report shall also identify the waste generation for the following categories:
 - (i) Food Waste – Non-backyard Compostable
 - ◆ Avoidable
 - ◆ Possibly Avoidable
 - ◆ Unavoidable
 - (ii) Food Waste – Backyard Compostable
 - ◆ Avoidable
 - ◆ Possibly Avoidable
 - ◆ Unavoidable
 - (iii) Corrugated Cardboard shipping boxes from online commerce
- (d) Sort results for each audit shall be provided in Microsoft Excel format

APPENDIX A – WASTE AUDIT MATERIAL CATEGORIES

Commodities		
1	ONP	Any item made of paper contained in the daily newspaper. Magazines, catalogues and glossy (non-newsprint) flyers.
2	Mixed Paper	All boxboard (e.g. cereal, shoe, frozen food), fine paper, writing paper, office paper, copy paper, bills, envelopes and statements, etc. Telephone directories, Paper egg cartons, molded pulp trays, brown and white paper bags, cores from toilet paper/ toweling/gift wrap. Paper that has been shredded; may be contained in a transparent or semitransparent plastic bag.
3	OCC	All Corrugated cardboard including Kraft paper linerboard and corrugated medium. Includes pizza boxes. Excludes Commodity #4
4	Corrugated Cardboard – online retail shipping boxes	All corrugated cardboard with readily visible online commerce markings (eg. shipping labels or boxes from online retailers)
5	Polycoat/ TetraPak	All gable top cartons and plastic coated containers that contained liquids (e.g. milk and ice cream) Aseptic boxes (e.g. juice, soup).
6	PET Bottles	All empty PET #1 bottles, jars and jugs (e.g. soda, water, juice, soaps). Clear, transparent green or transparent light blue.
7	PET #1 Thermoform	All #1 PET packaging other than bottles/jars/jugs that are clear, i.e. not coloured (e.g. clamshell containers for salads & pastries).
8	HDPE Natural Bottles	All #2 HDPE (natural) non-coloured bottles/jugs (e.g. milk jugs).
9	HDPE Coloured	All #2 HDPE (coloured) bottles/jugs (e.g. laundry detergent)
10	Mixed Rigid Plastic	Empty bottles/jars/jugs, and empty wide mouth tubs & lids (numbered #1 to #7 or without a number).
11	Aluminum Cans	Aluminum Used Beverage Cans and Aluminum cans that contained food products.
12	Steel Cans	Empty Steel food, beverage cans, non-aerosol cans, spiral wound composite food cans.
13	Glass	All glass bottles & jars used food & beverage (clear and coloured).
Divertibles		
14	Scrap Metal	General metals including scrap metals and cookware
15	Aluminum foil and trays	
16	Bulky Rigid Plastic	All non-container plastic items (i.e. laundry baskets, pails > 5 gal pails, Rubbermaid bins, etc.)
Organic Material		
17	Avoidable food waste – Backyard compostable	Food and drink thrown away that was, at some point prior to disposal, edible (e.g. slice of bread, fruits and vegetables).
18	Avoidable food waste – Non-backyard compostable	Food and drink thrown away that was, at some point prior to disposal, edible (e.g., meat, cheese).
19	Possibly avoidable food waste – Backyard compostable	Food and drink that some people eat and others do not (e.g. bread crusts), or that can be eaten when a food is prepared in one way but not in another (e.g. potato skins).
20	Possibly avoidable – Non-backyard compostable	Food and drink that some people eat and others do not (e.g. chicken feet), or that can be eaten when a food is prepared in one way but not in another (e.g. shrimp shells).
21	Unavoidable food waste – Backyard compostable	Waste arising from food or drink preparation that is not, and has not been, edible in normal circumstances (e.g. egg shells, durian shell, coffee grounds).

22	Unavoidable food waste – Non-backyard compostable	Waste arising from food or drink preparation that is not, and has not been, edible in normal circumstances (e.g. meat bones).
23	Yard Waste	E.g., Leaves, plant material, branches, grass clippings
24	Soiled Paper	E.g., pizza boxes, paper towel
25	Pet Waste	
26	Clean Wood	Unpainted and untreated wood (e.g. pallets, mixed lumber, rotting wood)
27	Diapers and Sanitary Products	
28	Other non-compostable organic waste	E.g., rubber, leather

Household Hazardous Waste		
29	HHW Product and/or Container	Any container with a hazardous symbol on the label not included in any other category, e.g. paint, stain, cleaners, pesticides
30	Automotive Oil and Antifreeze Product and/or Container	
31	Batteries – Consumer	All types of disposable and rechargeable batteries
32	Batteries – Lead Acid, Automotive	
33	Mercury containing items	E.g. fluorescent bulbs and tubes, thermostats and switches
34	Medical/Biological	E.g. Sharps, bandages
35	Other HHW	
36	Electronic Waste	E.g. Computers and peripherals, televisions, telephones
37	Small Appliances	E.g. Toasters, vacuums, irons
38	Other Electronic Waste	

Building Material		
39	Building Material	E.g., Treated or painted wood, gypsum/drywall/paper, masonry, rock, concrete, ceramics, porcelains, rigid asphalt products, carpet waste and underlay

Other		
40	Tires and tubes	E.g., Passenger, recreational, bicycle
41	Glass - non-food or beverage container	
42	Textiles	E.g., Clothing, fabric bags, luggage
43	All other residual material	
44	Film Plastic	E.g., shopping bags, plastic wrap and associated materials.
45	Expanded Polystyrene (foam)	E.g., foam food trays, packing foam and associated materials.
46	Disposable Cups	Disposable paper cups including single use beverage cups common to the quick-service food industry.
47	Liquid from #1 PET Bottles	Free flowing liquid (water, soda etc.) from PET bottles.