

Field Procedures Manual

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Waste Audit Services Project for RRFB Nova Scotia, 2011

by

HMJ Consulting Limited
(subcontracted by CBCL Limited)



HMJ Project 10-021

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CHAPTER 1 INTRODUCTION

The purpose of this document is to provide a Field Procedures Manual to guide and control the field work by HMJ Consulting Limited (HMJ) personnel involved in retrieving and characterizing the solid waste samples related to the project “Waste Audit Services for RRFB [Resource Recovery Fund Board Inc.] Nova Scotia” during the period of March through June, 2011. As such, this is an “internal” document for the instruction and control of HMJ personnel.

HMJ has been subcontracted by CBCL Limited, who have been contracted by RRFB for this service. HMJ is providing services to CBCL for a part of the overall project. The work to be carried out by HMJ comprises the characterization of solid waste materials being disposed at seven municipally operated landfills in Nova Scotia, and, the preparation of a practice manual for future use. For clarity, it is must be clear that this Field Procedures Manual is not the practice manual which forms part of the project deliverables related to CBCL’s consulting contract.

This Field Services Manual includes essential administrative procedures and protocols, health and safety guidelines, sorting instructions and operating procedures, for conducting the waste characterization study at the facilities from which samples of solid waste will be taken for analysis off site. It also includes instructions concerning communications and media relations as well as “sustainability” considerations and corporate expectations inherent in the work.

The objective of “characterization” (also known as the “waste audit” is to establish the proportions by weight of various categories of waste being disposed at the seven municipal solid waste landfills. The sources of and the categories of waste into which solid waste samples will be sorted, and the number of samples, have been prescribed by the RRFB. Samples will be taken from loads arriving at disposal points from residential sources and institutional, industrial and commercial (ICI) sources separately, and these samples will be analyzed separately. Since some of the landfill service areas involve the use of transfer stations, some of the samples will be collected at transfer stations rather than at their related landfills.

In general terms, the methods prescribed in this Field Procedures Manual will fully realize the potential for a small number of samples of waste, taken from a pre-determined number of vehicles selected at random at each prescribed disposal site, to represent the composition of the entire waste stream with a known statistical accuracy.

CHAPTER 2 FIELD PROCEDURES

2.1 Resources and Organization of Logistics

The following summarizes the human and other resources and the organization of personnel and logistics assigned to conduct the work:

1. The field team will consist of a Sampling Technician and a subordinate Sorter, both employed by HMJ. The Sampling Technician is in charge of the field work. He reports to the Technical Manager for the project.
2. Briefly stated, the Sampling Technician will travel to the sampling sites to retrieve samples, ensure proper sorting, weighing and recording of data at a central sorting station, train and supervise the Sorter, ensure the proper disposal of sampled materials after the sorting and weighing is completed, and be the principal liaison with others concerned with the field work. The Sorter will work only at the sorting station, sorting samples into required categories and assisting the Sampling Technician in every aspect of his or her work.
3. The retrieval of samples will be carried out on a systematic schedule, attached as Appendix A. The samples will be retrieved using a rented, compartmentalized, covered truck. The Sampling Technician will drive the truck to the designated sites to retrieve samples, and truck them to the sorting station.
4. The samples will be sorted at a sorting station located in a secure industrial building rented for the purpose. The building incorporates the sorting area itself, which is separated from other building uses. This space provides a well-lit, heated, comfortable work environment which will enable a thorough, accurate sorting of materials into the desired categories. The building has a full service washroom, lunch space, and a separate, secure room where street clothing may be changed for work wear at the

beginning and end of shifts. Suitable tables and materials handling and weighing equipment will be installed in the sorting station.

5. The hours of operation at the sorting station will be 8:00 a.m. until 5:00 p.m. Mondays through Fridays, during which time the designated loads will be sorted, weighed and recorded. Extension beyond 5:00 p.m. may be involved. Operation of the truck for collecting samples will involve varying hours away from the sorting station, according to the proximity of the sampling sites.
6. Suitable personal protective clothing and first response devices will be used. The employer will pay for all equipment and other matters involved in logistics and occupational health and safety provisions, other than workers' ordinary industrial clothing and footwear.

2.2 Coordination with Waste Disposal Site Operators

RRFB has written to operators explaining the purpose and method of the waste audit, and HMJ's Technical Manager has followed up to review arrangements in more detail.

Several days prior to the scheduled visit to a site where samples are to be taken, the Technical Manager will contact the site operator, using the contact information supplied by RRFB at the outset of the project. The purpose of the call will be to advise the date and coordinate the taking of the samples on that visit. The following will be achieved:

1. The procedure to be followed during the visit will be reviewed with the operator, in particular to determine the optimum range of times which would best suit the purpose of the sample selection protocol. Any special considerations should be discussed, such that when the Sampling Technician arrives on site, the sampling event should not be disruptive or chaotic. The procedure which will be followed to select the load to be sampled will be indicated, ie: a process that is in the control of the Sampling Technician.
2. The Technical Manager will confer with the disposal site operators to determine the typical pattern of haulage exhibited by their customer haulers. It is expected that there will be some differences between the typical haulage schedules and frequencies of those collectors serving residential sources versus those serving ICI, and differences in vehicle type, such as large compactor truck versus small straight truck, trucks serving entirely residential routes versus those involved in mixed residential-ICI loads, and commercial dumpster versus bag pickup styles.
3. With knowledge of the patterns and types of collection occurring at each site, the Technical Manager will develop a set of three suitable time of day and type of haulage vehicle determinants, for each of the residential and ICI sources, and endeavour to

sample at different times of day and for more than one type of haulage vehicle, at each site, for each class of sample (residential and ICI).

4. The site operator will be provided with the Sampling Technician's cell phone number, to use for any further coordination of effort between them.

2.3 Collecting and Disposing of Samples

The following procedure describes the conduct of the work in collecting and disposing samples:

1. Generally, the first task is to offload the previously sorted sample, which will be on the truck. It has been arranged that tipping fees will not be charged, as each landfill eventually gains as much as it loses in the sampling and disposal process, give or take a small amount. The materials on board will have been separated into recyclable and residue. The directions of site staff will be followed concerning the disposal.
2. The Sampling Technician will complete the relevant part of the Sample Movement Control Form attached as Appendix B. That form records the origin of the sample, and tracks it from point of origin to disposal of materials after sorting and data recording. Once the Sample Movement Control Form has been completed in all parts, it will be given to the Technical Manager.
3. Once on site and looking for a particular type of vehicle, the Sampling Technician will randomly pick the vehicle in advance of vehicle arrivals, using a random number generator. That vehicle will be directed to one side to offload its entire load at a safe spot negotiated with the landfill operator. The vehicle type will be noted and its weight (with payload and tare) would be recorded at those sites with motor vehicle scales (where no scaling is possible, an estimate of weight or volume will be made).
4. The load will then be mixed with a backhoe or loader, if available, so as to achieve a good degree of homogenization. Unusually large or bulky items will be disregarded. A sample of the desired weight will be then scooped from the pile at a random point, so as to extract a minimum of 135 kilograms for residential and 200 kilograms for ICI samples.
5. Sample components will be bagged and weighed with a hand-held spring balance on the spot to ensure that the target sample weight is achieved. Large or loose items not conveniently fitting in a garbage bag will be tied or netted so that the spring balance hook can lift them. The spring balance is to be an industrial grade, manually zeroed instrument capable of loading up to 25 kilograms, graduated at 250 gram intervals. It is to be fitted with an automatic weight recorder which enables one to lift the load slowly until it hangs free, and then set it down without having to read the gauge while the load is suspended. This device will be used only to ensure that the minimum sample weight has been achieved.

6. The sample will be loaded into one of the collection truck's separate bins. The Sampling Technician will enter the truck bin location and sample type and weight on the Sample Movement Control Form, as each sample is loaded.
7. The site operator will be informed when the Sampling Technician is ready to leave the site, and will be thanked for such assistance as was rendered. The samples will be trucked to the sorting station.

2.4 Sample Management and Data Recording

The procedure for managing the movement of samples in transit and categorizing waste at the sorting station will be as follows:

1. The samples arriving on the truck will be offloaded and placed into holding bins in the sorting station. The identity data for each sample (site of origin, type-residential or ICI, serial number, date of sampling) is to be immediately marked on a placard at the holding bin. The date and time of transfer to the holding bin is to be recorded on the Sample Movement Control Form.
2. The sorted materials from the preceding samples will then be loaded on the truck, separated as recyclable and residue.
3. Using the containers and plastic bags provided, the Sampling Technician and Sorter will commence separating the waste, one sample at a time, into the required categories as prescribed on the Sample Data Recording Form found at Appendix C. In general, heavy or voluminous items will be separated first and placed into their designated containers. Rakes, brooms, hand magnets (to identify ferrous vs. non-ferrous metals) and scoops will be used as needed.
4. When a container or bag has been filled it will be weighed on the platform scale and the weight will be recorded on the Sample Data Recording Form, for the relevant category. The category number will be written on the bag or container or item. When the Sorter weighs and records data, the Sampling Technician shall periodically check the accuracy of his or her work.
5. Most materials will be left in the bags for onward transport, and heavier material such as organic waste may be held and transported in green carts, at the discretion of the Sampling Technician.
6. Correction for excessive moisture content will be required if the materials collected are unusually wet due to rain or snow melt or cross contamination from other wet waste. In such cases, moisture contents can be determined by conventional materials laboratory analysis, and the constituent weights in such cases will be adjusted to the moisture content norms. If it is more convenient, this may also be accomplished by drying the wet

materials in ambient air in the sorting station and weighing them when they have returned to ambient conditions. Special care must be taken in these cases to identify these items by carefully tagging them, so that their weights can be added later to the correct sample's Sample Data Recording Form. Their original wet weight is not to be recorded, but the Sample Data Recording Form is to be annotated to indicate that there is some material to be weighed and added later. Since wet cardboard and papers are treated as a specific category under the "organics" group, this procedure will not be applied to those categories—wet cardboard and paper will be weighed as found, and recorded in their wet form.

7. This process will be continued until the entire sample has been divided into the required categories and each category has been weighed and the data recorded. These categories are very detailed, and the full sample must be sorted and weighed, including the remaining unidentifiable waste. The highest priority shall be given to a thorough sorting of the material, as the many categories involved each represent only small proportions of the overall sample, and accuracy is the primary objective.
8. Sorting of the next sample will not be started until all of the previous sample has been processed and the waste moved away from other samples. Before beginning to sort the next sample, the floor and tables must be swept well clean of any remaining materials which would otherwise affect the data collected for the next sample.
9. Any municipal hazardous and special waste (MHSW) shall be bagged and identified as to site of origin, and held in a secure place in the building until it can be dispatched to its site of origin.
10. Once a sample has been processed, it will be temporarily held until it is convenient to load and truck it to the next site of call. The materials will be kept segregated in the truck in recyclable and residue categories. For sanitary reasons, putrescible organics in green carts may be disposed ahead of schedule at a local organics receiving point rather than being held and taken on to the next site of call.
11. The Sampling Technician will take custody of the completed Sample Data Recording Forms and the Sample Movement Control Forms and guard them very carefully, and periodically give them to the Technical Manager, who will without delay copy them and convey copies or images to the data recording personnel.

2.5 Occupational Health and Safety

The following lists some common hazards that may occur during a physical handling or transportation of solid waste:

- Cuts and punctures from handling broken or hazardous materials such as broken glass, razor blades, bottles of unknown/unlabeled substances and other hazardous materials.
- Back injury from lifting heavy loads.
- Slipping and falling.
- Heat or cold stress and fatigue.
- Noise exposure from operation of heavy equipment.
- Animal and/or insect bites.
- Airborne contaminants, dust from solid waste.
- Chemical hazards, liquid spills from containers, household hazardous chemicals.
- Biological hazards, medical wastes and sharps.
- Harassment or intrusion by people intent on theft or personal injury to workers.

The following lists general safety procedures typically recommended for the physical sorting of solid waste. These procedures are to be followed carefully. It is inherent in the waste management industry that solid waste contains a very wide variety of materials in uncertain proportions, and thus it is not possible to prepare or rely on documentation in the nature of MSDS forms found in many industries:

- All waste sorting personnel should be in good physical condition, have had a recent medical exam, carefully consider taking applicable inoculations, not be sensitive to odours and dust, and be able to read warning signs/labels on waste containers.
- There will be absolutely no eating, smoking, or drinking during sorting activities. Food and liquids are to be kept away from the sorting area.
- Hands and faces should be washed before eating or drinking.
- Personnel must always wear the following during the sorting procedure: gloves, chemical goggles or safety glasses with splash shields, soft or hard hat, N-95 dust mask, disposable Tyvek overalls, and CSA approved steel-toed boots. Disposable overalls shall be disposed when they become torn or severely soiled with wet substances.
- Personnel collecting samples at sampling sites will wear the above items, plus hard hat (in lieu of soft hat) and safety vest.
- Personnel are not to open containers in an attempt to identify unknown chemical substances present in the waste stream: vials of chemicals, unlabeled pesticide/herbicide containers, and substances (e.g., chemicals, or needles) in unlabeled plastic/glass bottles/jugs. In those cases, when in doubt, treat these as household hazardous waste and place in tied bags and label as municipal hazardous and special waste (MHSW).
- If bio-hazardous wastes, such as hospital dressings, medical blood bags and tubing, and syringes, are detected, personnel are to proceed very carefully in handling them. Treat these

as MHSW and place in tied bags and label as MHSW. Then, dispose of gloves, overalls, soft hats and other items which may be contaminated with these substances and bag them for disposal as MHSW. Wash hands and any other hard surfaced items such as hard hats and the surfaces of floors, tables, and truck bed.

- When sorting glass, it is good practice to remove the large pieces first, and then remove the smaller shards. Use a rake or shovel to pull/push the material near the glass location and carefully continue sorting.
- Personnel are to frequently use hand sanitizers and to always wash hands and face before eating and after washroom use. Personnel involved in handling waste are to leave footwear and PPE at the building or in the truck, although those who want to take their footwear off site may do so but must then thoroughly clean them first.
- The Sorter will receive hands-on training by the Sampling Technician, on the first day of the sorting program. Health and safety will form a significant part of the training curriculum, and then at least four sample loads will be sorted by these two personnel working together, so that the sorting routine and health and safety practices will become familiar and uniform.
- The vehicle and the sorting station will each be equipped with an industrial #1 first aid kit and 10 pound fire extinguisher, and both personnel will carry a cell phone to enable calling should a medical or other emergency arise. The full service hospital nearest the sorting station location is only a twenty minute drive away, so a quick response to a medical, police or fire emergency call should be expected.

HMJ places a high priority on workplace health and safety, and will endeavour to provide suitably equipped and operated workplaces and to protect workers through training and encouragement of safe practices. Workers are to be reminded of their right to refuse to carry out work which they apprehend to be unsafe, and the process for resolution of such matters.

CHAPTER 3 COMMUNICATIONS AND MEDIA RELATIONS

The waste audit will be of interest to people who become aware of it through a variety of means. Solid waste management is a matter of direct responsibility and jurisdiction of both the provincial and municipal governments, and there are numerous parties involved or interested, such as elected officials, regional coordinators, waste management services contractors, municipal waste management staff, public interest groups, and the general public.

While the waste audit process itself is straightforward and its purpose should be readily understood and seen as a legitimate activity by most people, project field staff are to be aware that solid waste management is often a sensitive topic, and for that reason is sometimes of considerable interest to the media and others.

While there should be nothing inherently controversial about the idea of conducting waste audits, project field staff must be prepared to deal directly with persons with whom they come in contact in the course of their duties. The purpose of including this section in this Manual is to prepare and equip field staff to deal with dialogue which may range from pleasant inquiries and suggestions, to hostile criticism of their work and the role of government in waste management in its broadest sense.

All people with whom the field staff may be in contact have a rightful expectation to be received with courtesy and respect, and field staff should be able to respond directly to some questions or suggestions. The protocol will be as follows:

1. The Sorter, working at the sorting station, is not likely to be in direct contact with interested parties. However, if this occurs, the Sorter should simply explain that he or she is involved in a waste audit for a provincial government agency, for the purpose of gathering data on the composition of solid waste produced in various areas of Nova Scotia. Further inquiries are to be directed to the Sampling Technician or the Technical Manager. The Sorter will know the Sampling Technician's cell phone number and will also be supplied with a supply of the Technical Manager's business cards to assist in this.
2. Inquiries to the Sampling Technician are more likely to be made as compared to the Sorter, as he or she is in frequent direct contact with solid waste management staff including regional offices, municipalities, site operators, and haulers. He or she should

freely explain the above point, including the intended use of the data now being gathered, ie: for research purposes, to help in designing more effective or efficient recycling programs and the like. RRFB have indicated to HMJ that the stated purposes do NOT include regulatory compliance monitoring of waste management operations. Further inquiries are to be directed to the Technical Manager. The Sampling Technician will also be supplied with a supply of the Technical Manager's business cards to assist in this.

3. The Technical Manager may elaborate on the above noted information points, but not to the extent of commenting on policy or predictions concerning Nova Scotia's evolving waste management programs or infrastructure. Such matters will be referred by the Technical Manager to Mr. Lyon at RRFB.
4. Brief notes are to be made following any significant contact. It is not necessary to identify any inquiring party, though introductions are sometimes appropriate, in which case a note may be made in that regard.

CHAPTER 4 “SUSTAINABILITY” PROTOCOL

HMJ Consulting Limited and its client, CBCL Limited, are committed to environmental and social sustainability in business practices, as an important part of their sense of corporate social responsibility. This should be especially expected of consultants who have deep expertise in solid waste management, offering decades of experience in Nova Scotia and elsewhere.

More specifically, these firms are proud to point out that key personnel have operated award-winning waste management facilities as municipal department head managers in their pre-consultant lives. They are often called on for assistance: for example, HMJ was requested by Nova Scotia Environment to produce and deliver an extensive series of public workshops and lectures in Japan, concerning solid waste management practices in Nova Scotia. They did so on an unpaid basis as a matter of corporate social responsibility.

Their personnel have been sole-source selected and have carried out numerous industrial eco-efficiency assessments under the Nova Scotia EcoEfficiency program. Their work has been well received by industry, and all have taken a real satisfaction in searching out the ways and means by which industrial clientele can minimize their environmental impact while at the same time often seeing financial benefits.

In the conduct of this project, it is important to recognize the specific measures related to “sustainability” considerations, as follows:

1. All of the consumable goods and services needed will be procured in Nova Scotia, wherever possible.
2. All of the project personnel are resident Nova Scotians, and their incomes and expenditures remain mostly local.
3. The Sampling Technician is an engineer in training, and the professional experience gained by that person will accrue to meeting the requirements for registration as a professional engineer, representing an advancement in experience and credentials.
4. The smallest (yet capable), most fuel-efficient vehicle for sample collection has been selected, and it will be operated on the most efficient routes possible.

5. Upon completion of the sorting of each sample, recyclable materials will be kept separate from the residue which must go to landfills, and the recyclables will be properly disposed as such.
6. Reusable materials will be procured, such as bags and protective clothing, as much as is compatible with survey integrity and health and safety considerations.
7. Rental rather than purchase of as many items as possible will be practiced, such as the platform scale.
8. The occupational health and safety of personnel will be given an extremely high priority, by properly equipping and training them, and supporting them in the proper use of personal protective equipment and work practices.
9. Business travel for meetings and logistics will be avoided, preferring to use teleconferences and email.
10. Personnel will minimize the use of paper in copying, always preferring to copy both-sides and minimizing the volume of paper consumption in offices in favour of electronic records and documents.
11. Personnel will strive to develop and continue ingrained habits of efficiency in the use of buildings, materials, and transportation.

All actions taken by personnel during the project will be weighed against this protocol, recognizing that the protocol endeavours to fulfil serious corporate social responsibility objectives.

APPENDIX A
Sampling Schedule

RRFB Waste Audit Schedule 2011

Week	Date Range (Monday - Friday)	Monday	Tuesday	Wednesday	Thursday	Friday
1	21 – 25 March				Colchester	Kaizer Meadow (at Lunenburg transfer station) & Otter Lake
2	28 March - 1 April				Guysborough (at Antigonish transfer station)	Queens (at Clare transfer station) & West Hants (at landfill)
3	4 - 8 April				Otter Lake	Cumberland & Colchester
4	11- 15 April				Queens (at Yarmouth transfer station) & West Hants (at East Hants transfer station)	Guysborough (at Sydney transfer station)
5	18 - 22 April			Kaizer Meadow (at Kentville transfer station)	Cumberland & Colchester	<i>Good Friday</i>
6	25 - 29 April	<i>Easter Monday</i>		Otter Lake	Queens (at landfill) & Kaizer Meadow (at Lawrencetown transfer station)	
7	2 - 5 May			Queens (at Yarmouth transfer station) & West Hants (at landfill)	Guysborough (at Inverness transfer station)	
8	9 - 13 May		West Hants (at East Hants transfer station)	Cumberland Colchester		
9	16 - 20 May		Queens (at Clare transfer station) & Kaizer Meadow (at landfill)	Guysborough (at landfill)		
10	23 - 27 May	<i>Victoria Day</i>	Cumberland & Colchester	Otter Lake		
11	30 May - 3 June	Guysborough (at Sydney transfer station)	West Hants (at West Hants landfill) & Kaizer Meadow (at Lunenburg transfer station)			
12	6 - 10 June	Queens (at landfill) & Otter Lake	Cumberland			
13	13 - 17 June	Colchester & Kaizer Meadow (at Kentville transfer station)	Guysborough (at Pictou transfer station)			
14	20 - 24 June	Cumberland & West Hants at East Hants transfer station	Otter Lake			

APPENDIX B
Sample Movement Control Form

SAMPLE MOVEMENT CONTROL FORM
Waste Audit Services for RRFB (2011)

Sample number: _____ Taken at: _____

Method of selection of vehicle sampled and other notes (use back of page if needed):

Approximate weight of sample: _____ kg Residential or ICI origin (circle)

=====
PART 1: COLLECTION OF SAMPLE AT ORIGIN

Sample taken by: X _____ Time & Date: ____/____/____ 2011
Jacob Chard Truck bin: front – 1 2 3 4 – back (circle)

=====
PART 2: RECEIVING SAMPLE AT SORTING STATION

Sample received by: X _____ Time & Date: ____/____/____ 2011

Print name: _____

=====
PART 3: DISCHARGE OF SAMPLE AFTER SORTING

Recyclables: at location: _____

Discharge by: x _____ Time & Date: ____/____/____ 2011

Print name: _____

Residue: at location: _____

Discharge by: x _____ Time & Date: ____/____/____ 2011

Print name: _____

Household Hazardous Waste (if none, print "none"): at location: _____
or organics disposed locally (if none, print "none" or write details on back of form) _____ kg

Discharge by: x _____ Time & Date: ____/____/____ 2011

Print name: _____

APPENDIX C
Sample Data Recording Form

Sample Data Recording Form

Sample serial number:

Sample taken at:

Date of sampling:

Sample sorted by:

Sample number:

Sample size (kgs):

ICI or Residential (circle)

Results Reviewed by:

MATERIAL CATEGORY

SUB-CATEGORY

SEPARATION OF SUB-CATEGORIES

FIBRE	Uncoated Paper - newsprint quality	1	Dailies
		2	Weeklies
		3	Magazines - uncoated
		4	Flyers/inserts - uncoated
		5	Telephone Books/Yellow Pages
	Coated Paper - catalogue quality	6	Magazines - glossy
		7	Catalogues/Calendars
		8	Flyers/inserts - glossy
	Books	9	Hard cover
		10	Soft cover
	Mixed Fines	11	None
	Other	12	Specialized purpose
	Packaging	13	Boxboard cardboard - single layer
		14	Corrugated cardboard - multi layer - dry
		15	Waxed corrugated cardboard - multi-layer
		16	Fast-food boxboard
		17	Fast-food wrap
		18	Molded Pulp
		19	Kraft paper bags/wrap
		20	Laminated paper bags/boxboard
ORGANICS	Food Waste	21	Home/ICI food waste not in containers (see 24)
	Tissue	22	Facial tissue and gift wrapping paper tissue
	Yard Waste	23	Home/ICI gardening, brush, leaves
	Other	24	Food in containers, including weight of containers
	Fibre	25	Wet paper and cardboard

DAIRY	Beverage - Dairy milk only	26	Polycoat (gable top) - 1 litre and greater
		27	Polycoat (gable top) - less than 1 litre
		28	Plastic jug (HDPE - Number 2) - 1 litre and greater
		29	Plastic jug (HDPE - Number 2) - less than 1 litre
		30	Tetra pak
	Ice Cream	31	Plastic bag (LDPE film - Number 4)
		32	Plastic container (HDPE - Number 2)
	Other Dairy	33	Boxboard container (with lining)
		34	Plastic container (HDPE - #2, PP - #5, PS - #6)
		35	Plastic container (other than 2, 5 and 6)
Non-fluid Milk Product	36	Tetra pak	
		37	Plastic film

NON-DAIRY	Beverage - Non-Dairy alternatives	38	Polycoat (gable top)
		39	Plastic container
		40	Tetra pak
	Foodstuffs	41	Tetra pak

PLASTIC	Food and other container packaging	42	PET - Number 1
		43	HDPE - Number 2
		44	PVC - Number 3
		45	LDPE - Number 4
		46	PP - Number 5
		47	PS - Number 6
		48	Other - Number 7
		49	Non-numbered containers
		Composite packaging	50
	Plastic Bags/Film	51	LDPE - Number 4
		52	LDPE - Number 4 - not suitable for recovery
		53	LDPE - Number 4 - Other bags, film packaging, wrap
		54	PP - Number 5 - Agriculture
	Non-packaging End-of-Life Products	55	Crates, pails and tubs
		56	Consumer goods
57		Non-program electronic products/components	
58		Non-program paint products	
59		Non-Municipal Hazardous and Special Waste	

DISPOSABLE CUPS	Fibre	60	Disposable cups - branded - hot
		61	Disposable cups - branded - cold
		62	Disposable cups - other
	Plastic	63	Single use - branded
		64	Single use - non-branded
GLASS	Food and Consumer Goods Packaging	65	Clear - food containers
		66	Coloured - food containers
		67	Clear - non-food containers
		68	Coloured - non-food containers
	Automotive	69	
Other Products	70		
METAL	Food and Consumer Goods Packaging	71	Aluminum food containers
		72	Aluminum - other
		73	Steel food containers
		74	Steel composite containers
		75	Steel - other
	Non-Paint Program Pressurized Containers	76	Aluminum
		77	Steel
	Non-Electronics Program items	78	Appliances - small
		79	Appliances - large
		80	Electronics - small
	Other	81	Electronics - large
82		Extension cords and wire of uncertain materials	
MUNICIPAL HAZARDOUS AND SPECIAL WASTE (MHSW)	Pressurized gas containers	83	Non-refillable
		84	Re-fillable
	Marine flares	85	by symbol or container type
	Mercury containing products	86	by symbol or container type
	Batteries	87	Non-rechargeable
		88	Rechargeable
		89	Lithium-ion
	Sharps and Pharmaceuticals	90	None
	Pesticides and their containers	91	PCA regulated products
		92	Non-PCA regulated products
	Automotive fluid containers	93	HDPE - Number 2
		94	PP - Number 5
		95	Other

	Other fluids, fuel, lubricants & containers	96	HDPE - Number 2
		97	Other
	Solvents and containers	98	
	Corrosives and containers	99	
	(Crankshaft) oil filters	100	
	Oily rags	101	
TEXTILES			
	Fabric	102	Clothing
		103	Household use
	Footwear	104	
	Other	105	
C&D			
	Wood	106	dimensional - clean
		107	dimensional - coated
		108	engineered/composite - clean
		109	engineered/composite - coated
		110	pressure-treated
	Wallboard and coverings	111	drywall - clean
		112	drywall - coated
	Shingles	113	asphalt
		114	other
	Flooring	115	carpet
		116	other
	Insulation	117	fibreglass
		118	foam (PS)
		119	other
	Glass	120	window/door
		121	decorative
	Countertops	122	laminata
		123	slate/marble
	Ceiling Tile	124	None
BULKY ITEMS			
	Furniture	125	mattresses - coil
		126	mattresses - foam
		127	mattresses - futon
		128	box spring
		129	upholstered - seating
		130	solid wood
		131	engineered/laminata wood
		132	other (non-plastic)

SPECIAL CARE WASTE	Diapers	133	
	Other	134	Medical gloves, pharmaceuticals, cosmetics
REDEEMABLE CONTAINERS	Beverage	135	Sort 1 - Aluminum cans
		136	Sort 2 - Glass - clear
		137	Sort 3 - PET - clear
		138	Sort 4 - Glass -coloured
		139	Sort 5 - PET - green
		140	Sort 6 - Other plastic (3, 5, 6 &7)
		141	Sort 8 - Steel cans
		142	Sort 9 - Gable top
		143	Sort 10 - Tetra pak
		144	Sort 11 - HDPE - translucent
		145	Sort 13 - PET - blue
		146	Sort 21 - Glass - clear (over 500 ml)
		147	Sort 22 - Glass - coloured (over 500 ml)
		148	Sort 23 - Liquor PET - clear and coloured (over 500 ml)
149	Sort 24 - Liquor PET - clear and coloured		
150	Sort 25 - Liquor - other		
151	Sort 26 - Liquor - other (over 500 ml)		
REGULATED PAINT	Empty plastic	152	
	Empty metal	153	
	Empty aerosols	154	
REGULATED TIRES	Passenger and Light Truck	155	
	Tractor Trailer	156	
OFF-ROAD TIRES	Non-Tire Program items	157	Small
		158	Large

REGULATED ELECTRONICS	Computers	159	Desktop
		160	Portable
	Computer Peripherals	161	
	Desktop Printers	162	
	Display Devices	163	
	Personal/Portable A/V Systems	164	
	Vehicle A/V Systems	165	
	Home Theatre in a Box	166	
	Home Audio/Video Systems	167	
	Non-cellular telephones	168	
Cellular telephones	169		

APPENDIX B

Distribution of Sampling Locations for 2011 Waste Audit Project

Waste Audit Services for RRFB

Background Information: Distribution of Sampling

(At landfills versus at transfer stations, where applicable.)

Resulting from decisions taken at job meeting March 11, 2011.

LANDFILL	TRANSFER STATIONS (IF ANY RELEVANT TO DISTRIBUTION OF SAMPLING)	APPROXIMATE USAGE OR TONNAGE (IF RELEVANT) TONNES PER YEAR	DISTRIBUTION OF SAMPLES (EACH LANDFILL SERVICE AREA REQUIRES 6 VISITS)
WEST HANTS	East Hants	Equal from each area: East: 5,400 West: 3,432 West H is direct haul, East H is via transfer station	Equal #s (3) from landfill direct haul and East Hants transfer station. Take one sample from Town of Windsor (WH) vehicle at West H (1 of the 3 in WH)
QUEENS	Yarmouth Clare Direct haul	7,160 5,490 6,634	Equal numbers (2) from each
KAIZER MEADOW (CHESTER)	Lawrencetown Kentville Lunenburg Direct haul	6,508 14,700 10,647 5,222	Sample #s: 1 2 2 1
GUYSBOROUGH	CBRM Inverness Richmond Victoria Antigonish St. Mary's Pictou Direct haul	32,770 4,677 2,126 1,458 2,961 582 12,816 11,059	Sample #s: 2 1 0 0 1 0 1 1
CUMBERLAND	None relevant		All at landfill
COLCHESTER	None		All at landfill
OTTER LAKE	None relevant		All at Otter Lake

APPENDIX C

Actual Sample Collection Schedule for 2011 Waste Audit Project

RRFB 2011 Waste Audit Actual Schedule

WEEK	DATE RANGE (MON. – FRI.)	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1	21 – 25 March				Colchester	Kaizer Meadow (at Lunenburg transfer station) & Otter Lake
2	28 March – 1 April				Guysborough (at Antigonish transfer station)	West Hants (at landfill)
3	4 - 8 April		Queens (at Clare transfer station)		Otter Lake	
4	11- 15 April				West Hants (at East Hants transfer station)	Guysborough (at Sydney transfer station)
5	18 - 22 April			Queens (at Yarmouth transfer station) & Kaizer Meadow (at Kentville transfer station)	Cumberland & Colchester	Good Friday
6	25 - 29 April	Easter Monday		Otter Lake & Queens (at landfill)	Kaizer Meadow (at Lawrencetown transfer station)	Cumberland & Colchester
7	2 - 5 May			Queens (at Clare transfer station) & West Hants (at landfill)	Guysborough (at Inverness transfer station)	
8	9 - 13 May		West Hants (at East Hants transfer station)	Cumberland Colchester		
9	16 - 20 May		Queens (at Yarmouth transfer station) & Kaizer Meadow residential only (at landfill)	Guysborough (at landfill)	Kaizer Meadow ICI only (at landfill)	
10	23 - 27 May	Victoria Day	Cumberland & Colchester	Otter Lake		
11	30 May – 3 June	Guysborough (at Sydney transfer station)	West Hants (at West Hants landfill, residential only – vehicle from Town of Windsor collection) & Kaizer Meadow (at Lunenburg transfer station)			
12	6 - 10 June	Queens (at landfill) & Otter Lake	Cumberland & West Hants (at West Hants landfill, ICI only)			Queens (at Clare transfer station)
13	13 - 17 June	Colchester & Kaizer Meadow (at Kentville transfer station)	Guysborough (at Pictou transfer station)			
14	20 - 24 June	Cumberland & West Hants at East Hants transfer station	Otter Lake			

APPENDIX D

Full Waste Audit Data Set for 2011 Waste Audit Project

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	Sample collection point (read across)																				
			ICI 1	Res 2	ICI 3	Res 4	ICI 5	Res 6	ICI 7	Res 8	Res 9	ICI 10	Res 11	ICI 12	Res 13	ICI 14	ICI 15	Res 16	Res 17	ICI 18	ICI 19	Res 20	Res 21
FIBRE	Uncoated Paper - newsprint quality	1 Dailies		1.01	0.74	1.72	3.7			2.6	0.35	0.08	1.9		0.37		2.39		8.89	0.8	4.6		2.8
		2 Weeklies									0.07					0.15			0.2		0.75		0.09
		3 Magazines - uncoated					0.27										0.2				0.37		
		4 Flyers/inserts - uncoated		0.62	1.92	0.45	0.78	0.65	1.8	1.52	0.23	1	1.41	1.47	1.8	0.09		1.77	0.97	2.68		3.96	1.7
		5 Telephone Books/Yellow Pages		0.32																			
	Coated Paper - catalogue quality	6 Magazines - glossy			0.47		2.5		2.3	0.82			1.13		0.43	1.43				2.1	2.47		
		7 Catalogues/Calendars	0.37		0.12		5.9		0.6	0.34		0.74	0.91		0.77	1.68				1.72		0.1	
		8 Flyers/inserts - glossy			0.28	0.32			1.8	0.31	0.23	0.24	0.25		0.55	0.3				0.69		0.05	0.64
	Books	9 Hard cover			1.05																		2.61
		10 Soft cover	1.09			0.27			0.69	0.22		0.43	0.34			2.94		5.56	0.1	1.1			2.94
	Mixed Fines	11 None	0.34	3.72	3.74	2.63	8.4	1.35	6.4	5.6	0.85	3.74	2	8.4	1.4	7.8	1.41	8.06	7	12.21	0.31	0.74	2.3
	Other	12 Specialized purpose	0.42		1.81		0.29		0.85	0.1		1.54		0.7	0.14			0.4	0.02	0.64	0.49	0.19	0.21
	Packaging	13 Boxboard cardboard - single layer	4.02	3.08	5.83	3.2	6.6	2.96	6	2.2	1.6	7	5.8	4.6	3.4	5	6.6	3.2	6.6	8.4	4.4	11.2	1.96
		14 Corrugated cardboard - multi layer - dry	18.9	1.67	20	1.72	0.88				1.4	0.84	26		53.3	7.62	3.89	14.5	4.55	0.1	10	15.2	6.5
		15 Waxed corrugated cardboard - multi-layer					1.43																
		16 Fast-food boxboard	0.1	0.42	0.32		0.35	0.12	0.29	0.05	0.23	0.44				0.08			0.84	0.25	0.04	1.02	
		17 Fast-food wrap	0.14	0.1	0.06	0.04	0.72	0.07	0.11	0.12		0.89		2.01	0.09	0.05			0.07	0.27	0.02	0.07	
		18 Molded Pulp	0.12	0.07	1.12		1.54	0.52	0.89		0.24	1.73		0.84		0.85	0.09		0.56	0.16	1.28	0.45	
		19 Kraft paper bags/wrap	0.52	0.64	0.98	0.65	3.08	0.14	1.8	0.56	0.2	6		1.53	0.56	0.23	2.06	3.25	0.88	0.39	1.81	0.46	5
		20 Laminated paper bags/boxboard	0.31	0.92		0.2		0.19	0.25	0.06	0.32	0.2				0.41			2.05	0.29	0.05		0.15
ORGANICS		Food Waste	21 Home/ICI food waste not in containers (see 24)	11.9	26.6	44.2	19.9	18	13.2	13.6	24.22	26.4	28	24.6	1.64	15.8	9.52	18.8	47.8	32.4	33.2	22.6	22.2
	Tissue	22 Facial tissue and gift wrapping paper tissue	17.2	8.8	4.32	5	26.2	9.4	14.2	5.8	4.4	12	12.6	8.8	4.72	34.3	9.6	13.6	11.4	8.4	12.2	5.2	5.6
	Yard Waste	23 Home/ICI gardening, brush, leaves	3.3					6.8	9		0.06		0.46		4.61			0.36	8.2	12			
	Other	24 Food in containers, including weight of containers	0.1	23.84	14.2	9.1	1.32	26.8	6.4	24.5	26.2	19	7.2	9.6	23.4			1.01	13.2	5.6	3.2	18	
	Fibre	25 Wet paper and cardboard	5.5	16.2	2.46			0.6	0.44	0.2	2	2.42			8.15			1.52	1.07		0.57		
DAIRY	Beverage - Dairy milk only	26 Polycoat (gable top) - 1 litre and greater	0.24		0.7		0.09		0.28	0.14	0.07	0.4	0.84		0.63		1.45	0.74	0.42	0.67	0.2	0.24	
		27 Polycoat (gable top) - less than 1 litre	0.04	0.14			0.3	0.09	0.26	0.09	0.03	0.21	0.03		0.04			0.26	0.29		0.11	0.22	
		28 Plastic jug (HDPE - Number 2) - 1 litre and greater			0.37							0.37			0.09		0.45	0.39			0.25		
	Ice Cream	29 Plastic jug (HDPE - Number 2) - less than 1 litre		0.08				0.02	0.08		0.05	0.47	0.07					0.2	0.18		0.07	0.03	
		30 Tetra pak																					
	Other Dairy	31 Plastic bag (LDPE film - Number 4)																					0.02
		32 Plastic container (HDPE - Number 2)			0.17										0.07			1.03	0.25				
	Non-fluid Milk Product	33 Boxboard container (with lining)							0.07						0.16								
34 Plastic container (HDPE - #2, PP - #5, PS - #6)				0.16																			
35 Plastic container (other than 2, 5 and 6)																							
NON-DAIRY	Beverage - Non-Dairy alternatives	36 Tetra pak																					
		37 Plastic film																					
	Foodstuffs	38 Polycoat (gable top)																					
		39 Plastic container																					
PLASTIC	Food and other container packaging	40 Tetra pak																					
		41 Tetra pak							0.04	0.19					0.06			0.53					
		42 PET - Number 1	0.47	1.34	0.29	0.54	2.81	1.67	0.8	0.58	0.23	0.28	1.6	2.1	1.05		2.35	1.8	0.84	0.53	0.77	1.63	0.67
		43 HDPE - Number 2	0.44	0.78	0.88	0.17	2.2		1.6	0.66	0.22	0.29	0.52			1.8	1.26	2.4	1.11	2.09	0.62	2.7	1.02
		44 PVC - Number 3			0.2	0.78	0.99	0.16	0.37		0.1	0.2			0.44			0.25	0.14			0.53	0.12
45 LDPE - Number 4													0.1					0.23					
46 PP - Number 5		0.69	0.57		1.76	0.67	0.57	0.31	0.24	0.43	0.74		1.12				0.48	1.06	0.16				
47 PS - Number 6	0.79	1.19	1.76	0.69	1.65	1.6	2.8	1.9	3	3.8	2.86	3.6	3.03	0.56	9.2	6	1.49	5.49	11	0.94	0.49		

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	Location																				
			ICI 1	Res 2	ICI 3	Res 4	ICI 5	Res 6	ICI 7	Res 8	Res 9	ICI 10	Res 11	ICI 12	Res 13	ICI 14	ICI 15	Res 16	Res 17	ICI 18	ICI 19	Res 20	Res 21
		48 Other - Number 7			0.2	1.03			0.47	0.02		0.16	0.38		0.15				0.04		0.11	0.46	0.15
		49 Non-numbered containers	1.88	1.88	5.7	2.2	3.43	2.6	3.6	2.53	2.4	2.6	2.73	3.23	2.4	6		5.06	1.26	0.89	3.33	3.34	0.67
	Composite packaging	50	1.1	1.8	0.55	0.25	1.07	1.12	0.66	0.54	0.56	1.32	2.62	0.66	0.81	0.56	0.2	1.94	0.8	0.93	0.71	0.36	0.26
	Plastic Bags/Film	51 LDPE - Number 4	2.28	0.25	0.26		0.04		0.14			0.03	0.55		0.09			0.09	0.19				2
		52 LDPE - Number 4 - not suitable for recovery		4	1.86	4.5	12.2	4.4	8	5.8	1.8	9.4	5.8	16.6	5	14.1	11.2	8	3.6	12.4	11.6	11.4	7.6
		53 LDPE - Number 4 - Other bags, film packaging, wrap	2.64	3.55	6.27	2.77	9.4	3.6	5.8	3.6	2.4	5.8	5.6	9.8	6.4	4.3	15.4	8.8	2.8	8	7.4	3.4	
		54 PP - Number 5 - Agriculture							0.06	4.1				2.6			9.2						
	Non-packaging End-of-Life Products	55 Crates, pails and tubs			0.45	0.73						0.18	2.8	2.12	5.8			0.73	0.35	1.12	2.09		
		56 Consumer goods	1.74	2.2	11.04	3.39	0.52	1.79	13.6	3.8	11.3	0.54	3.02	2.89	1.03		2.61	1.97	0.46	0.89			5.2
		57 Non-program electronic products/components	0.03		1.32	0.29			0.43			0.13	8.8	4.53									1.3
		58 Non-program paint products							7.5					1.41									
		59 Non-Municipal Hazardous and Special Waste			0.58	3.96	1.17											2.8	0.77	0.91			
DISPOSABLE CUPS	Fibre	60 Disposable cups - branded - hot	1.13	1.1	1.56	0.17	1.08	0.68	2.1	0.51	0.74	15.4	0.2	0.73	0.84	1.89		1.87	2.42	1.57	0.89	0.78	4.4
		61 Disposable cups - branded - cold	0.22	0.14	0.14		0.68		0.08	0.15	0.14	0.9		0.89	0.12			1.82	0.21	0.11			
		62 Disposable cups - other	0.09			0.19			0.36		0.03				0.19	0.65				1.08			
	Plastic	63 Single use - branded	0.09			0.02			0.1			0.38	0.03						0.16				0.26
		64 Single use - non-branded			0.22		0.55		0.08			0.02	0.49			1.4		0.07	0.08	0.09	1.39		
GLASS	Food and Consumer Goods Packaging	65 Clear - food containers	1.19	1.93	0.66			0.52	1.8			0.35	2.4		2.6	1.1							
		66 Coloured - food containers																					
		67 Clear - non-food containers			0.13																		
		68 Coloured - non-food containers																					
	Automotive	69																					
	Other Products	70	1.22	0.1	0.96	0.13	0.26	0.61	0.88	1.4	0.04	1.8	0.28		1.1				0.75	1.76			
METAL	Food and Consumer Goods Packaging	71 Aluminum food containers		0.05																			
		72 Aluminum - other	0.13	1.03	0.44	0.08	2.67	1.72	0.35	0.4	0.36	0.33	1.57	0.26	0.63	0.05		0.13	0.65	0.04	0.71	0.64	
		73 Steel food containers	1.38	0.77	3.12	1.37	0.33	0.59	0.12	0.42	1.1	0.37		0.89	2.6	0.09		3.49	1.54	0.14	0.93	3.12	
		74 Steel composite containers	0.11		0.24		0.18	0.41	0.13	0.57	0.8		0.29		0.55						0.11		
		75 Steel - other	0.22	5.4	8.6	2.34			1.6	3.5	5.2	8.4		2.3	0.13	0.04		1.47	1.43	3.19	1.85	2.14	
	Non-Paint Program Pressurized Containers	76 Aluminum	0.79						0.1										0.06				
		77 Steel			0.24		0.48			0.42	0.28				0.33	0.5			0.21				
	Non-Electronics Program items	78 Appliances - small							1.6			9		11.8	0.17				3.16				
		79 Appliances - large																					
		80 Electronics - small																					
		81 Electronics - large																					
	Other	82 Extension cords and wire of uncertain materials	8.67		0.47	1.46				2.4	1.1	3.6			1.17		7		3.33	0.17			
Municipal Hazardous and Special Waste (MHSW)	Pressurized gas containers	83 Non-refillable																					
		84 Re-fillable			0.48																		
	Marine flares	85 by symbol or container type																					
	Mercury containing products	86 by symbol or container type																					
	Batteries	87 Non-rechargeable	0.04	0.47	0.56	0.25		0.43	0.13	0.24	0.4	0.03	0.71			0.23		0.89	0.1			0.05	
		88 Rechargeable																					
		89 Lithium-ion																					
	Sharps and Pharmaceuticals	90 None		0.01					0.22							0.01			0.21				
	Pesticides and their containers	91 PCA regulated products																					
		92 Non-PCA regulated products													0.6								
	Automotive fluid containers	93 HDPE - Number 2			0.1	0.34			0.22	1.7	0.23	0.3		2.1						0.51			
		94 PP - Number 5																					

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	Sample collection point (read across)																				
			ICI 1	Res 2	ICI 3	Res 4	ICI 5	Res 6	ICI 7	Res 8	Res 9	ICI 10	Clare	ICI 11	Res 12	ICI 13	Res 14	ICI 15	ICI 16	Res 17	ICI 18	ICI 19	Res 20
		95 Other			0.84													2.38					0.1
	Other fluids, fuel, lubricants & containers	96 HDPE - Number 2	0.51	0.18																			
	Solvents and containers	97 Other	1.06							3.8					0.7								
	Corrosives and containers (Crankshaft) oil filters	98																			0.37		
		99			0.49										8								
	Oily rags	100																					
		101								0.24											0.81		
TEXTILES	Fabric	102 Clothing	2.86	8.8	13.2	12.6	1.54	13.8	25.8	12.8	7.6	3.8	21.2		3.71	0.98	56	8.6	9.8	32.2	3.4	17.7	30.3
		103 Household use	0.45	0.2	0.16	0.33	1	0.47	3.8	2.9	5.5	1.6	3.8	1.57	2.8	5.1	6.4		1.98	0.73	3.13		
	Footwear	104	0.51	0.61	1.74	1.88	0.23	0.55	4.2	0.52	2.3				1.3			2.8					0.78
	Other	105	2.54	2.6	1.54	0.25			4.8		7.7			1.15	0.75	0.27	9.2	3	2.3	4.8	4.2	0.71	
C&D	Wood	106 dimensional - clean	38.9		1.1	0.6	2.1	8.2			0.6	5.8			0.31		4.29	1.74	0.1	0.68			
		107 dimensional - coated				11.8														0.06			
		108 engineered/composite - clean	13.2		1.28						0.09	1.31	3.2				2.6			0.18			
		109 engineered/composite - coated			3.81	2.2			2						0.25					0.46			
	Wallboard and coverings	110 pressure-treated																					
		111 drywall - clean	16.7		14.3			1	6.4														
		112 drywall - coated					0.25																
	Shingles	113 asphalt				8.8									0.1			0.83					
		114 other								0.41													
	Flooring	115 carpet			0.59				4	3													
		116 other	23.8		1.19	2.5						2.53		5.5									
	Insulation	117 fibreglass	9.7		1.09					6					0.81								11.5
		118 foam (PS)	0.33						0.66														
		119 other										1.04											
	Glass	120 window/door																					
		121 decorative																					
	Countertops	122 laminate																					
		123 slate/marble																					
	Ceiling Tile	124 None																					
BULKY ITEMS	Furniture	125 mattresses - coil																					
		126 mattresses - foam																					
		127 mattresses - futon																					
		128 box spring																					
		129 upholstered - seating							2.4						5.8								
		130 solid wood			3.59																		
		131 engineered/laminate wood				0.11									0.9								
		132 other (non-plastic)													21.2		8.6						
SPECIAL CARE WASTE	Diapers	133		15.8	5.72	16.9	58.6	18.4	7.4	1.3	9.4		4.58	0.76	4	15.8		21.2	5	8	32.2	1.01	18.4
	Other	134 Medical gloves, pharmaceuticals, cosmetics	0.88	0.69	0.62	3.15	12.6	0.82	5	0.92	0.05	0.92			0.71	46.8			0.46	0.84	30.8		10
REDEEMABLE CONTAINERS	Beverage	135 Sort 1 - Aluminum cans	0.14	0.26	0.22	0.09	0.66	0.13	0.18		0.01	1.32	0.04	1.9	0.42	0.1	1.89	0.79	0.08	0.85	1.62	0.64	0.19
		136 Sort 2 - Glass - clear		0.46	0.18							1.4								0.12			0.34
		137 Sort 3 - PET - clear	0.12	0.25	1.12	0.23	0.69	0.28	0.42	0.05	0.03	2.53	0.08		0.4	1.43	2.4	1.8	0.42	1.39	2.85	2.05	0.92
		138 Sort 4 - Glass -coloured				0.51																	
		139 Sort 5 - PET - green			0.28				0.1			0.17				0.09	0.08	0.2		0.24	1.22	0.1	
		140 Sort 6 - Other plastic (3, 5, 6 &7)				0.03																	
		141 Sort 8 - Steel cans			0.17															0.18			

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	Sample collection point (read across)																					
			ICI 1	Res 2	ICI 3	Res 4	ICI 5	Res 6	ICI 7	Res 8	Res 9	ICI 10	Res 11	ICI 12	Res 13	ICI 14	ICI 15	Res 16	Res 17	ICI 18	ICI 19	Res 20	Res 21	
		142 Sort 9 - Gable top		0.07	0.33	0.08				0.08	0.07	0.08					0.58							
		143 Sort 10 - Tetra pak		0.07	0.1	0.03	0.26			0.1	0.05	0.02		0.14		0.08	0.73	0.71		0.04	0.42	0.66	0.21	
		144 Sort 11 - HDPE - translucent																						
		145 Sort 13 - PET - blue											0.12	0.06				0.02	0.06		0.09			
		146 Sort 21 - Glass - clear (over 500 ml)			0.53																		1.71	
		147 Sort 22 - Glass - coloured (over 500 ml)																						
		148 Sort 23 - Liquor PET - clear and coloured (over 500 ml)																			0.79			
		149 Sort 24 - Liquor PET - clear and coloured							1.4							2.95								
		150 Sort 25 - Liquor - other																						
		151 Sort 26 - Liquor - other (over 500 ml)																						
REGULATED PAINT	Empty plastic	152																					0.34	
	Empty metal	153																					0.52	
	Empty aerosols	154																						
REGULATED TIRES	Passenger and Light Truck	155																						
	Tractor Trailer	156																						
OFF-ROAD TIRES	Non-Tire Program items	157 Small				5.18																		
		158 Large																						
REGULATED ELECTRONICS	Computers	159 Desktop																						
		160 Portable																					2.54	
	Computer Peripherals	161	0.15	0.06																				
	Desktop Printers	162																						
	Display Devices	163																						
	Personal/Portable A/V Systems	164																						
	Vehicle A/V Systems	165																						
	Home Theatre in a Box	166																						
	Home Audio/Video Systems	167				2.88			5.2		2.5													
	Non-cellular telephones	168																			0.18			
	Cellular telephones	169		0.32																				
			203.11	147.28	205.47	145.94	204.4	129.13	200.96	136.47	132.58	203.3	137.33	206.81	130.67	176.52	206.22	196.46	138.9	201.91	191.32	137.71	129.46	

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	Sample collection point (read across)																					
			ICI 22	ICI 23	Res 24	Res 25	ICI 26	ICI 27	Res 28	ICI 29	Res 30	Res 31	ICI 32	Res 33	ICI 34	Res 35	ICI 36	Res 37	ICI 38	Res 39	ICI 40	Res 41	ICI 42	
FIBRE	Uncoated Paper - newsprint quality	1 Dailies	3	1.2	2.52		0.2		3.64	0.19	2.03		4.85		0.34	1.14	0.18		1.25		0.06	2.11	2.35	
		2 Weeklies										0.08										0.2	0.59	
		3 Magazines - uncoated										0.96				0.96	2.97						0.14	0.15
		4 Flyers/inserts - uncoated	2.68	0.09	0.62	1.55	1.18	2.74	2.84	0.2	0.63	0.05	7.58	1.52			0.24	0.42	0.78			0.81	2.13	2.31
		5 Telephone Books/Yellow Pages						1.17																
	Coated Paper - catalogue quality	6 Magazines - glossy		0.95	0.71		0.71			0.82			1.02	0.37		2.41							0.53	0.65
		7 Catalogues/Calendars			1.18		0.59	0.69	1.22		0.19	0.69			0.72	1.98							6.2	
		8 Flyers/inserts - glossy	2.4	0.15	0.15	0.24	0.49		0.45	0.32	0.65	0.31	0.32	0.8	0.22		0.19	0.3	0.16			0.11	1.2	
	Books	9 Hard cover				0.14	0.92												8.2				2.66	0.26
		10 Soft cover					4.1	0.35				0.45						3.2			4			
	Mixed Fines	11 None	7.2	1.4	7.4	5.2	2.48	4.4	4	6.2	4	3.8	2.83	2.6	16.8	0.58	2.28	2.72	10.2			13	4.4	2.64
	Other	12 Specialized purpose		0.38				0.2	1.25				0.14		0.19		0.04	0.23		3.03	0.17	3.57		
	Packaging	13 Boxboard cardboard - single layer	5.4	3.2	1.23	8.8	4.6	8.6	4.68	10.3	2.88	3.55	13.4	6.9	11.4	3.4	4.46	2.2	7.8			4.4	7.31	8.4
		14 Corrugated cardboard - multi layer - dry	13.4	1.4	1.03	0.88	0.74	0.61	0.21			3.23	4.04	0.42	0.62	4.6	4.8	2		2.96		0.7	10.6	1.3
		15 Waxed corrugated cardboard - multi-layer													7.2							1.13		
		16 Fast-food boxboard	0.19	0.12	0.04	0.4	0.53	0.97	0.31	0.06			1.42	0.16	3.4	0.11				0.15		0.64	0.1	
		17 Fast-food wrap	0.24	0.05	0.03	0.05	3.76	0.13	0.1	0.24		0.02		2	0.37	0.07	0.04			0.04		0.3		
		18 Molded Pulp	0.23	0.26	0.63	0.59	0.97		1	0.37		0.87	0.59	0.04	1.41	0.67	0.17			0.27		0.49	0.32	3.04
		19 Kraft paper bags/wrap	0.6	1.17	6.6	1.29	10	2.26	0.75	2.13	0.6	0.49	19		1.48	0.65	2.24	0.47	0.87			1.8	0.3	
		20 Laminated paper bags/boxboard	0.44		0.71	0.24	0.49						0.12										0.24	0.3
ORGANICS		Food Waste	21 Home/ICI food waste not in containers (see 24)	23.42	6.48	17	19.6	27.6	36	34.2	57.4	20.4	17.2	2.47	22.6	31	21.4	42.8	36.6	38.4	73.2	23	44.6	53.8
	Tissue	22 Facial tissue and gift wrapping paper tissue	11.5	27.2	3.2	7	14	8.8	6.4	14	9.2	4.6	18	4.8	15.8	4.8	10	2.8	20	3.8	6	9.2	9	
	Yard Waste	23 Home/ICI gardening, brush, leaves	5.4					7.6	18	17	2.02			1.51	14.6		7.2	2		7.8	1.74			
	Other	24 Food in containers, including weight of containers	3.95	0.3	0.26	2.8	2.34	11.4	7.6	6.4	2.55	6	2.74	32.4	14.8		18	12.6	17		0.4	1.6	8.2	
	Fibre	25 Wet paper and cardboard	13		13.6							0.78	0.55		29.2	0.66	6.4		5.2		1.58	2.72		
DAIRY	Beverage - Dairy milk only	26 Polycoat (gable top) - 1 litre and greater						1.82						1.29	0.65	0.63						0.91	1.64	
		27 Polycoat (gable top) - less than 1 litre		0.13		0.27	0.68	0.27				0.19		0.64	4.07							0.49	0.23	
		28 Plastic jug (HDPE - Number 2) - 1 litre and greater													0.19									
	Ice Cream	29 Plastic jug (HDPE - Number 2) - less than 1 litre					0.16	0.09				0.08		0.28										0.05
		30 Tetra pak																						
		31 Plastic bag (LDPE film - Number 4)														0.03								
		32 Plastic container (HDPE - Number 2)					0.28							0.35										
Other Dairy	33 Boxboard container (with lining)				0.16																	0.07		
	34 Plastic container (HDPE - #2, PP - #5, PS - #6)																							
NON-DAIRY	Beverage - Non-Dairy alternatives	35 Plastic container (other than 2, 5 and 6)																						
		36 Tetra pak																						
	Foodstuffs	37 Plastic film																						
PLASTIC	Food and other container packaging	38 Polycoat (gable top)																						
		39 Plastic container																						
		40 Tetra pak																						
		41 Tetra pak				0.06																		
		42 PET - Number 1		0.83	0.84	1.61	0.49	2.79	0.99	1.18	0.85	1.38	1.9	0.54	0.67	0.56	1	0.51	0.42	0.4	1.4		0.43	
		43 HDPE - Number 2		2.4	1.7	2.27	0.32	1.45	0.87	3.54	1.28	1.84	3.25	1.37	1.37	0.34	1.45	0.63	0.35	1.39	0.41	1.12	0.99	
44 PVC - Number 3		0.11		0.05			0.12	0.08				0.08	5.84	0.04	0.06					0.2	0.06	1.63		
45 LDPE - Number 4						0.05					0.21		0.12			0.04								
46 PP - Number 5		3.24		0.1	0.72		0.84	0.5		0.23	0.97	0.72	0.09	0.26		0.26		0.24		0.96	0.89	0.09		
47 PS - Number 6		1.44	3.4	0.88	2.4	6.6	3.8	1.09	4.39	3	4.6	4.6	2.61	0.8	2.3	2.7	2.94	3.14	1.58	2	1.1	0.65		

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
		48 Other - Number 7			0.03				0.11				0.17		0.74	0.16							
		49 Non-numbered containers	2.52	3.2	6	5	4.2	2.02	2	4.18	4.4	1.73	3.8	3	2.76	0.68	3.87	2	3.8		2.2	4.8	1.13
	Composite packaging	50	2.28	0.27		1.61	7.4	0.93	1.69	1.49	1.55	0.52	2.6	2	1.57	0.48	1.36	0.49	0.32			0.37	0.35
	Plastic Bags/Film	51 LDPE - Number 4	0.1		0.25		0.23	0.05				0.05		1.1	0.08	0.21	2.24	0.08		2.47	0.06	0.06	0.16
		52 LDPE - Number 4 - not suitable for recovery	5.59	11.6	6.4	4.8	8.2	12.2	4.16	4.25	8.4	5.2	15.4	4.25	11.4	7.2	10.8	6	3.2	10.2	4.4	4.51	6.2
		53 LDPE - Number 4 - Other bags, film packaging, wrap	7.6	9.2	4.6	4.86	4.6	8.4	3.38	8.7	4.6	5	22.2	4	0.32	3.8	6.8	5.6	3	16.2	4.6	1.62	2.22
		54 PP - Number 5 - Agriculture															0.05						
	Non-packaging End-of-Life Products	55 Crates, pails and tubs	8.2	3.2	3.8	0.36		3.8		0.68		2.22				1.72	2.4		6.53	1.03		2.1	
		56 Consumer goods	0.82	5.2	2.8	8.8		5.2	1.64	1.16	3.62	11.4	0.83	1.85	2.85	1.45	8.2		0.82		3.6	12.2	1.22
		57 Non-program electronic products/components			0.18				1.56					1.59		0.65					0.35		
		58 Non-program paint products																					
		59 Non-Municipal Hazardous and Special Waste						1.13	1.27		2.79	2.03	1.5	0.62	0.15	0.79			7.4		2.2	19.8	1
DISPOSABLE CUPS	Fibre	60 Disposable cups - branded - hot	2.99	5.2	1.87	1.03	24.2	1.27	1.79	4.7	1.21	1.27	10.8	2.1	1.3	1.01	3.56	1.34	1.48		2.8	0.67	
		61 Disposable cups - branded - cold	0.13	0.17	1.71	0.35	2.06	0.62	0.17	0.39	0.42		1.19	0.17	0.08		0.83		0.37		1.03	0.1	
		62 Disposable cups - other		1.03	0.12							0.17	0.46		0.07		0.05				0.12		
	Plastic	63 Single use - branded				3.51								0.37	0.11						0.06	0.04	
		64 Single use - non-branded		0.75	0.36	0.23		0.04	0.02	0.25				0.76	0.15	0.15		0.77		0.21	0.71		
GLASS	Food and Consumer Goods Packaging	65 Clear - food containers				2.3			3.2								5.4		0.54				
		66 Coloured - food containers																					
		67 Clear - non-food containers																					
		68 Coloured - non-food containers																					
	Automotive	69				1.3																	
	Other Products	70			4.2	1.13	1.07		4.8			0.34		3.4	0.43		2.19		0.19		0.24	1.89	0.49
METAL	Food and Consumer Goods Packaging	71 Aluminum food containers																					
		72 Aluminum - other	1.4		0.38	0.54		1.33	0.47	0.49	1.15	1.21		2.2	1	0.8	0.8		0.74	1.93	0.2	0.28	
		73 Steel food containers	3.26		0.95	0.22	3.38			0.79	0.44			2.63	1.76	0.46	0.53	0.81	1.11			1.67	
		74 Steel composite containers				0.38			0.46			0.81		0.04		0.57	0.18		0.29				
		75 Steel - other			5.1	7.4		4.8	1.94		0.58	1.47		1.13	0.21	1.84	1.2	0.38			9	1.95	
	Non-Paint Program Pressurized Containers	76 Aluminum				0.08	0.11									0.12			0.26				
		77 Steel				0.59	0.48	0.97							0.24	0.34						1.2	0.12
	Non-Electronics Program items	78 Appliances - small							0.36			2.56			0.96	2.8	10.2		7.8				
		79 Appliances - large																					
		80 Electronics - small																					
		81 Electronics - large																					
	Other	82 Extension cords and wire of uncertain materials														1.14					1.8		1.14
Municipal Hazardous and Special Waste (MHSW)	Pressurized gas containers	83 Non-refillable				0.51									0.42								
		84 Re-fillable																					
	Marine flares	85 by symbol or container type																					
	Mercury containing products	86 by symbol or container type																					
	Batteries	87 Non-rechargeable			0.08	0.89		1.09	0.4	0.31					0.71		0.28	1.99	0.12			0.08	
		88 Rechargeable																					
		89 Lithium-ion																					
	Sharps and Pharmaceuticals	90 None			0.98			0.28															
	Pesticides and their containers	91 PCA regulated products																					
		92 Non-PCA regulated products				0.28																	
	Automotive fluid containers	93 HDPE - Number 2	1.14		0.56			0.32	0.1	1.93					0.86	0.24	1.97						
		94 PP - Number 5																					

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
			ICI	ICI	Res	Res	ICI	ICI	Res	ICI	Res	Res	ICI	Res	ICI	Res	ICI	Res	ICI	Res	ICI	Res	ICI
			22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
		95 Other														0.4							
	Other fluids, fuel, lubricants & containers	96 HDPE - Number 2							0.37		0.49												
	Solvents and containers	97 Other						0.1	0.96	1.22				1.1		3.6							
	Corrosives and containers (Crankshaft) oil filters	98																					
	Oily rags	99																					
		100																					
		101														0.8							1.01
TEXTILES	Fabric	102 Clothing	4.46	34	20.6	13.8		25.2	9	24.8	25.4		17.6	5.4	6.2	2.2	12.2	5.4	25.6	18.6	0.31		8.2
		103 Household use		7.2	3.2	1.42		3.2								4.8	0.4			7		18.6	3.44
	Footwear	104	2.15		4.2	1.31		9.8	0.7		2.78		8.4		3.2	2.1		4.17					0.53
	Other	105		5.6	1.13	8.8	3.25	6	1.56	3.2		0.15		3.2	2.8	2.27		7.8	12.8		3	0.28	1.75
C&D	Wood	106 dimensional - clean	2.16		0.11		1.75	1.78			0.54	30.2			0.16		5				0.16		
		107 dimensional - coated									1.34	3.32			0.79						7		0.1
		108 engineered/composite - clean	0.84			0.44		0.55	1.03		1.39	10.4			0.22		1.66				2.14		
		109 engineered/composite - coated						3.6		0.28		0.54	2.34		2.43							8.6	
	Wallboard and coverings	110 pressure-treated																					
		111 drywall - clean									1.44				0.5	1.8	1.74				17.2		3.44
		112 drywall - coated																					
	Shingles	113 asphalt							2.44														
		114 other																					
	Flooring	115 carpet	15.8										2.45					2.6					
		116 other																			4.4		1.55
	Insulation	117 fibreglass						8	0.51	8													0.4
		118 foam (PS)	4.43			2.8																	
		119 other																					
	Glass	120 window/door																					
		121 decorative																					
	Countertops	122 laminate																					
		123 slate/marble																					
	Ceiling Tile	124 None																					
BULKY ITEMS	Furniture	125 mattresses - coil																					
		126 mattresses - foam																					
		127 mattresses - futon																					
		128 box spring																					
		129 upholstered - seating				2.45					1.83												
		130 solid wood																					
		131 engineered/laminate wood					18.6																
		132 other (non-plastic)					16.9																
SPECIAL CARE WASTE	Diapers	133	1.42	34.6	1.35	4.08	2.84			1.67	14.8			11.6		28.2	15	19.6	18.8	15		14	
	Other	134 Medical gloves, pharmaceuticals, cosmetics	7.63	31.8		0.14		0.52	0.4	1.88	1.34	0.32	6.4		0.3	1.14	2.2		11	20.6	2.11		1
REDEEMABLE CONTAINERS	Beverage	135 Sort 1 - Aluminum cans	0.07	0.04	0.13	0.11	2.26	1.83		0.88	1.86	0.57	3.14	0.84	0.28	0.44	1.38	0.36	1.04			5.6	0.35
		136 Sort 2 - Glass - clear			0.2		2.36	0.74		0.3	0.67				0.34	1.38							
		137 Sort 3 - PET - clear	0.85	0.15	0.61		2.65	1.52		2.36	1.54	2.2	2.29	2.7	0.91	0.9	1.9	0.6	1.87				0.8
		138 Sort 4 - Glass -coloured					1.16	0.34															
		139 Sort 5 - PET - green			0.11		1.84			0.72	0.35	0.31	0.29	0.19	0.17	0.07	0.15	0.07	0.29				0.04
		140 Sort 6 - Other plastic (3, 5, 6 &7)																					
		141 Sort 8 - Steel cans						0.33							0.68		0.18	0.86					

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
		142 Sort 9 - Gable top																					
		143 Sort 10 - Tetra pak	0.42	0.12			0.13	0.64		0.54	0.39	0.38	0.43	0.42	0.76		0.28	0.12	0.4				0.1
		144 Sort 11 - HDPE - translucent																					
		145 Sort 13 - PET - blue																					
		146 Sort 21 - Glass - clear (over 500 ml)									1.25						1.1						
		147 Sort 22 - Glass - coloured (over 500 ml)																					
		148 Sort 23 - Liquor PET - clear and coloured (over 500 ml)								0.85					1.46								
		149 Sort 24 - Liquor PET - clear and coloured	2.06								2.12												
		150 Sort 25 - Liquor - other																					
		151 Sort 26 - Liquor - other (over 500 ml)																					
REGULATED PAINT	Empty plastic	152								0.9													
	Empty metal	153			0.26	0.44		1.16	1.42														
	Empty aerosols	154																					
REGULATED TIRES	Passenger and Light Truck	155	25.4		0.96																		
	Tractor Trailer	156																					
OFF-ROAD TIRES	Non-Tire Program items	157 Small																					
		158 Large																					
REGULATED ELECTRONICS	Computers	159 Desktop																					
		160 Portable																					
	Computer Peripherals	161								0.72													
	Desktop Printers	162																					
	Display Devices	163																					
	Personal/Portable A/V Systems	164														5.2							0.57
	Vehicle A/V Systems	165																					
	Home Theatre in a Box	166																					
	Home Audio/Video Systems	167												1.17									
	Non-cellular telephones	168			4.6				0.59														0.47
	Cellular telephones	169																					0.16
			201.45	204.55	138.26	134.54	197.64	205.05	139.79	204.71	138.54	138.45	202.3	143.42	195.94	137.27	201.92	143.34	202.36	204.49	137.44	198.06	138.56

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT			
FIBRE	Uncoated Paper - newsprint quality	1 Dailies	1.4	3.45	1.76				0.42	1.69	1.39	0.25	0.46	0.25		3.76	24.6	3.32	8.8	1.04	0.17	0.6				
		2 Weeklies												0.07	0.18		0.21				0.06					
		3 Magazines - uncoated																			0.19					
		4 Flyers/inserts - uncoated	0.98	4.21	2.64	0.17	0.05			0.41	1.31	1.84		1.73	0.85		0.52	0.42	0.8	1.17	0.44	0.63	0.59	0.63		
		5 Telephone Books/Yellow Pages																								
	Coated Paper - catalogue quality	6 Magazines - glossy	1.64	0.67		0.6	0.29							0.4				0.44		3.63	0.15					
		7 Catalogues/Calendars	0.79		2.1		0.46		0.15		2.68							0.34		0.12						
		8 Flyers/inserts - glossy	0.36	0.58	0.38	0.16	0.22		0.23	0.94	0.65		0.85	0.28		0.14	1.32	0.66	0.38	0.17	1.14	1.89	0.24			
	Books	9 Hard cover					1.74		2.14					0.46												
		10 Soft cover	3.25		1.68		3.2		0.34		0.3		1.31		0.05	1.48		3.38	0.16		0.18					
	Mixed Fines	11 None	2.15	10.4	18.8	0.96	4.8	1.08	0.69	4.4	5.48	3.2	12.2	2.6	1.95	4.6	1.63	9	4.4	17.8	6.6	1.25				
	Other	12 Specialized purpose	0.94						0.03	0.53	0.08	0.86	0.13	0.03		0.09	0.18			0.32	1.39		0.18			
	Packaging	13 Boxboard cardboard - single layer	6.2	13.6	2.14	3.15	8	2.1	2.35	5.6	5.4	5.4	3	3.8	2.8	2.84	4.6	7.4	10.4	4.07	3.7	8	8.4			
		14 Corrugated cardboard - multi layer - dry	2.8	9.2		6.2	0.24	5	1.24	15.8	0.91	5.6	18.4	2.58		1.66	1.71	1.3	2.14		0.35	2.2				
		15 Waxed corrugated cardboard - multi-layer			4.62																					
		16 Fast-food boxboard	0.48	0.39	0.52	0.05	0.19		0.02	0.21		0.24	0.21	0.54		1.17	0.07	0.18	1.56	6.02						
		17 Fast-food wrap		0.12			0.03		0.42	0.39		0.54	1.13					0.05	0.81	0.01						
		18 Molded Pulp	0.12	1.33	0.44	0.24				0.71	0.13	1.38	0.53	0.53		0.25	0.7	0.12	1.18	0.1	1.25	0.18	1.32			
		19 Kraft paper bags/wrap	1.23	2.69	10.06	1	2.68		0.94	2.95	0.21	1.29	3.35	1.55	1.8	0.54	1.25	1.78	0.9	1.08	0.72	3.6	0.69			
		20 Laminated paper bags/boxboard	0.5	10.8	0.16	0.16	0.38		0.37	0.22						0.09	0.07			0.04	0.56	0.29				
ORGANICS	Food Waste	21 Home/ICI food waste not in containers (see 24)	6.8	13	16.4	24.4	18	153	7	32.4	34.2	47.2	12.6	48.4	41.4	48.2	69.2	24.4	46.6	27.4	38	43	18.2			
	Tissue	22 Facial tissue and gift wrapping paper tissue	7.8	19.2	9.74	10.4	7.6		6.8	11.4	10.6	13.4	6.6	2.8	9	9.6	8.2	9.6	14	4.2	7	6.4				
	Yard Waste	23 Home/ICI gardening, brush, leaves		3.6						4.2	1.51					6.2	1.82		12	3.54		9.6				
	Other	24 Food in containers, including weight of containers	3.74	32.2	1.03	25.6			10.6	18.6	1.5	11	2.25	4.2		2.76	12.4		9.8	1.02	18.6	4				
	Fibre	25 Wet paper and cardboard			2.22	0.08	2.23	10.8		7.2		12.4	1.7	2.79		2.6	1.11	2.95								
DAIRY	Beverage - Dairy milk only	26 Polycoat (gable top) - 1 litre and greater			0.36		0.22		0.51	0.13	0.39	0.45	0.13	0.25		0.95	0.89	0.22			0.41					
		27 Polycoat (gable top) - less than 1 litre			3.1	0.14	0.12		0.4	0.07	0.25	0.12	0.05	0.11		3.74		1.4		0.09						
		28 Plastic jug (HDPE - Number 2) - 1 litre and greater				0.15	0.23				0.13			0.28		0.24				0.17						
	Ice Cream	29 Plastic jug (HDPE - Number 2) - less than 1 litre	0.11						0.08	0.16	0.13	0.19			0.21				0.25	0.05	0.06	0.09	0.43			
		30 Tetra pak																								
		31 Plastic bag (LDPE film - Number 4)																	0.04							
		32 Plastic container (HDPE - Number 2)	0.19			0.15		5.2	0.45				0.44							3.6			0.12			
Other Dairy	33 Boxboard container (with lining)																					0.39				
	34 Plastic container (HDPE - #2, PP - #5, PS - #6)							0.15																		
Non-fluid Milk Product	36 Tetra pak																									
	37 Plastic film																									
NON-DAIRY	Beverage - Non-Dairy alternatives	38 Polycoat (gable top)																								
		39 Plastic container																								
	Foodstuffs	40 Tetra pak																								
	41 Tetra pak																	0.08	0.09							
PLASTIC	Food and other container packaging	42 PET - Number 1	0.94	1.75	0.2	0.75	1.52		0.83	0.68	0.74	1.07		0.64	0.89	1.73	0.79	2	2.55	0.64	0.89	0.33	1.42			
		43 HDPE - Number 2	0.57	2.28	0.3	0.44	2.4		1.41	0.82	1.2	0.52		0.8	1.03	1.08	2.26	1.45	1.21	0.76	1.24	0.75	0.62			
		44 PVC - Number 3	0.12			0.12			0.27	0.07		0.13	8.2	0.09					0.31	0.06	0.23					
		45 LDPE - Number 4																								
		46 PP - Number 5	0.41	1.38	0.24	0.45	0.9		0.41	1.31	0.4	0.1		0.14	0.28	0.49	0.17	0.12	0.31	0.21	0.26	0.44	1.34			
47 PS - Number 6	1.86	2.79	1.2	1.91	4.8		6.2	2.65	1.13	9	2.6	0.9	1.01	9	0.56	1.67	7.4	3	3.6	6.4	5					

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
		48 Other - Number 7		0.06			0.07				0.06			0.05							0.07		0.06
		49 Non-numbered containers	1.74	2.28	4	1.38	4.6		2.21	3	1.62	0.92	3.46	1.11	0.6	2.13	4.4	2.52	3.07	2.14	2.3	0.4	4
	Composite packaging	50	0.87	0.62	0.66	1.08	1.55		1.07	1.66	0.09	1.86	0.33	0.47	2	0.81	0.46	0.86	0.97		0.41	0.72	
	Plastic Bags/Film	51 LDPE - Number 4			0.04				0.24	0.79	0.15	0.22	0.17				0.33		0.07	0.21	0.14	0.47	
		52 LDPE - Number 4 - not suitable for recovery	2.32	14	4.4	3.78	17	7.6	4.4	8.6	15	14	9	2.29	7.8	3.4	13.4	7.2	7.4	2.78	8.2	10	4.2
		53 LDPE - Number 4 - Other bags, film packaging, wrap	3.71	4.6	8	3	9.4	11	8.2	6.8	7.4	13.2	2.74	1.81	9.2	4.4	21	7.4	3.26	5.6	4.8	11.4	6.8
		54 PP - Number 5 - Agriculture					0.98				0.002												
	Non-packaging End-of-Life Products	55 Crates, pails and tubs			4.08	0.96	0.93		5.4	3.4	0.21	4.6	0.44	1.98		4.8			0.97	0.11	3.4		3.86
		56 Consumer goods	3.76	2.85	4.24	1.79	3.4		2.8	3.2	13.6	1.05	1.64	3	25.8	3.8	1.02	2.89	12.8	9.8		9.8	
		57 Non-program electronic products/components					1.28							0.21					2.55	0.42	0.84		
		58 Non-program paint products																					
		59 Non-Municipal Hazardous and Special Waste			1.7						0.91	2.33	10.2	2.68		1.89		0.75					
DISPOSABLE CUPS	Fibre	60 Disposable cups - branded - hot	1.46	3.36	1.12	0.9	1.47		0.84	7.2	0.17	5.2	0.54	1.43	4.8	2.08	0.12	0.82	29	2	2.6	1.06	2.58
		61 Disposable cups - branded - cold	0.5	0.48		0.24	0.17		0.16	0.62		0.37	0.24	0.18		0.9	0.03	0.52	0.41	0.12	0.14	0.08	
		62 Disposable cups - other	0.07			0.14		0.89	0.2	0.02		0.16	0.06			0.11		0.04	0.09				0.96
	Plastic	63 Single use - branded				0.08			0.11	0.13						0.05			0.29	0.18		0.04	0.19
		64 Single use - non-branded			1.1	0.06			0.13	0.06		0.23							0.1	0.09		0.15	0.78
GLASS	Food and Consumer Goods Packaging	65 Clear - food containers	0.99			0.68	1.36		1.8	1.92		0.24					0.4				0.4		
		66 Coloured - food containers																					
		67 Clear - non-food containers																					
		68 Coloured - non-food containers																					
	Automotive	69																					
	Other Products	70	1.35	1.22		3.45	5.4		3	1.35				3.43	10.9		0.21	1.74		0.53	2.6	0.93	
METAL	Food and Consumer Goods Packaging	71 Aluminum food containers							0.07														
		72 Aluminum - other	0.58	0.46	0.12	0.53			0.82	0.85	0.58	0.22	0.13	0.17		0.36	0.44	0.89	0.25	0.25	1.54	0.64	0.85
		73 Steel food containers	1.07	0.55		1.24			2.8	1.39	0.8	0.48		1.44	0.71		0.56	1.04	2.89	1.5	0.3	1.27	
		74 Steel composite containers	0.21		0.16	0.3	0.27		0.29	0.06	0.16		0.35	0.2	0.12			0.52	0.21	0.38			
		75 Steel - other	0.65	0.64	4.76	1.82	3.2		6.2	3.2		3.14		8.2	19	7.6	0.35	2	0.93	7.2	2.06	0.41	1.1
	Non-Paint Program Pressurized Containers	76 Aluminum							0.2							0.3	0.07						
		77 Steel	0.28		0.8	0.08			0.2				0.28	0.13			0.3				0.32		0.65
	Non-Electronics Program items	78 Appliances - small		4.8					12.2	4					1.06								5.8
		79 Appliances - large																					
		80 Electronics - small																					
		81 Electronics - large																					
	Other	82 Extension cords and wire of uncertain materials			0.18						1.2			0.62							0.11	0.63	
Municipal Hazardous and Special Waste (MHSW)	Pressurized gas containers	83 Non-refillable																					
		84 Re-fillable																					
	Marine flares	85 by symbol or container type																					
	Mercury containing products	86 by symbol or container type																					
	Batteries	87 Non-rechargeable			0.1	1.54			0.63	0.68				0.33			0.2						
		88 Rechargeable																					
		89 Lithium-ion																					
	Sharps and Pharmaceuticals	90 None												0.1									
	Pesticides and their containers	91 PCA regulated products																					
		92 Non-PCA regulated products			0.3																		
	Automotive fluid containers	93 HDPE - Number 2		1.04		0.26			0.07	1.14			0.11	0.24	0.07			0.6					
		94 PP - Number 5	2.64			3.2																	

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
		95 Other							0.14									1.15					
	Other fluids, fuel, lubricants & containers	96 HDPE - Number 2																					
	Solvents and containers	97 Other										0.07											
	Corrosives and containers (Crankshaft) oil filters	98																					
		99																			0.12		
	Oily rags	100																					
		101							0.27														
TEXTILES	Fabric	102 Clothing	44.4	17.2	26.2	6.6	8.2		12.2	10.8	8.8	9.4	27.2	6.2		10.4		11.8		11.4	37	2.8	1.4
		103 Household use	1.14			16.2			2.6	2.6		5.6		1.93							4.4		5.2
	Footwear	104	11.8			2.47	2.03		2.6	1.72		1.08	2.6					4.6	1.68	0.65			1.8
	Other	105	0.72		7.2	5.8	1.6		2.8		2.24	3.2	6.2	1.29	2.4		1.16	5.2	1.31	1.18	10.2	5	
C&D	Wood	106 dimensional - clean			3.54				4.6	0.21	0.34	8.6	10.4		0.3								7.8
		107 dimensional - coated					1.04				8.2	6.8									0.38		1.22
		108 engineered/composite - clean							1.27		3			1.17	7					1.12			
		109 engineered/composite - coated	1.06									6.4	2.6	0.3						5.2			10.8
		110 pressure-treated																					
	Wallboard and coverings	111 drywall - clean			5.6		2.24					9				8.6						2.2	13.4
		112 drywall - coated																					
	Shingles	113 asphalt		0.78												3.2							0.68
		114 other																					
	Flooring	115 carpet							4.6	3.2			16										7.6
		116 other				1.44																	
	Insulation	117 fibreglass			6.8					1.48				0.46									
		118 foam (PS)																				1.49	
		119 other																					
	Glass	120 window/door																					
		121 decorative																					
	Countertops	122 laminate																					
		123 slate/marble																					
	Ceiling Tile	124 None																					
BULKY ITEMS	Furniture	125 mattresses - coil																					
		126 mattresses - foam																					
		127 mattresses - futon																					
		128 box spring																					
		129 upholstered - seating												3.2	21.2								
		130 solid wood		0.62																			
		131 engineered/laminate wood																					
		132 other (non-plastic)	5.16																				
SPECIAL CARE WASTE	Diapers	133	2.15	5.8	27.6	6.4	13.2		13.6	5.8					41.8		22.4			8.6	13.6	3	
	Other	134 Medical gloves, pharmaceuticals, cosmetics	0.65	1.22	2.52	1.33	3.6		2.4	2.4	0.75	0.92	0.84	1.67	6.4	1.18	1.23			0.73	1.6	3.85	
REDEEMABLE CONTAINERS	Beverage	135 Sort 1 - Aluminum cans	0.12	1.84	0.22				0.07	0.93	0.47	0.88	0.33	0.84	0.76	0.49	0.19	0.11	0.47	0.06	0.47	0.35	0.12
		136 Sort 2 - Glass - clear	0.69							0.47				0.48							0.25		
		137 Sort 3 - PET - clear	0.57	2.2	0.38	0.06			0.23	1.67	1.4	1.78	0.81	1.83	0.94	1.43	0.3	0.4	1.31	0.28	0.56	0.89	0.18
		138 Sort 4 - Glass -coloured															2.47						
		139 Sort 5 - PET - green	0.11	0.16					0.1	0.11		0.21	0.06	0.04	0.15		0.09			0.22		0.18	
		140 Sort 6 - Other plastic (3, 5, 6 &7)																					
		141 Sort 8 - Steel cans				0.2				0.29	0.62												

RRFB Waste Audit Data (2011)

Landfill (read across)

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Source (residential vs ICI)
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MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
		142 Sort 9 - Gable top															0.51					0.07	
		143 Sort 10 - Tetra pak	0.07	0.23	0.44	0.02			0.03	0.23	0.39	0.05	0.22	0.25	0.58		0.1	0.08		0.09	0.33		0.58
		144 Sort 11 - HDPE - translucent														0.36							
		145 Sort 13 - PET - blue		0.05						0.04													
		146 Sort 21 - Glass - clear (over 500 ml)								0.37	1.3												
		147 Sort 22 - Glass - coloured (over 500 ml)																					1.05
		148 Sort 23 - Liquor PET - clear and coloured (over 500 ml)																					
		149 Sort 24 - Liquor PET - clear and coloured																					
		150 Sort 25 - Liquor - other																					
		151 Sort 26 - Liquor - other (over 500 ml)																					
REGULATED PAINT	Empty plastic	152									0.52												
	Empty metal	153	4.4		7.4						0.43	5.4	4										1.15
	Empty aerosols	154																					
REGULATED TIRES	Passenger and Light Truck	155											8.4										
	Tractor Trailer	156																					
OFF-ROAD TIRES	Non-Tire Program items	157 Small											3.8										
		158 Large																					
REGULATED ELECTRONICS	Computers	159 Desktop																					
		160 Portable											1.57										
	Computer Peripherals	161				1.52																	
	Desktop Printers	162												0.73	0.11	5.6							
	Display Devices	163																					
	Personal/Portable A/V Systems	164													2.8								
	Vehicle A/V Systems	165																					
	Home Theatre in a Box	166																					
	Home Audio/Video Systems	167											0.08							12.8			
	Non-cellular telephones	168																					
	Cellular telephones	169																					
			140.62	200.7	203.75	142.77	146.35	196.67	139.79	204.572	136.9	203.72	200.83	137.49	167.44	201.21	203.55	137.9	205.98	144.06	203.3	138.29	136.16

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Landfill (read across)

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Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	
			ICI	ICI	Res	ICI	Res	ICI	Res	Res	ICI	ICI	Res	ICI	Res	ICI	Res	ICI	Res	Res	ICI	ICI	Res	
			64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	
FIBRE	Uncoated Paper - newsprint quality	1 Dailies	6.8	1.47		2.8	0.43	4	1.28	0.87	2.4	8.2	2.29			0.32	0.92	2.6	1.21	0.7	5.8	5.2	1.29	
		2 Weeklies	0.06						0.86			0.11				0.04	0.05		0.04		0.02	0.26	0.03	
		3 Magazines - uncoated				0.55								0.48			0.3					0.02	0.11	
		4 Flyers/inserts - uncoated	0.97	0.13	1.38	0.25	0.82	0.14	0.53	0.76	1.6	0.24	0.55	0.05	0.03	1.09	0.68	0.74	0.38	0.71	1.25	3.2	0.3	
		5 Telephone Books/Yellow Pages																						
	Coated Paper - catalogue quality	6 Magazines - glossy				1.3	0.47		1.05	0.29		0.56				0.36			0.11	0.82	7.6	1.28	0.72	
		7 Catalogues/Calendars				0.9	0.13	0.46	0.39	0.29	0.71	0.07	0.11		0.19			0.22		0.51		0.31		
		8 Flyers/inserts - glossy	8.4	0.62	0.13	0.55	0.46	0.31	0.29	0.12	0.17	0.6	0.65	0.16	0.14	0.83	1.04	0.12		0.31	0.85	0.33	0.24	
	Books	9 Hard cover																			0.23		0.18	
		10 Soft cover				0.69						0.54	0.68	0.23			0.72	0.19		1.42		0.97		
	Mixed Fines	11 None	9.2	3.1	6.8	1.41	3.17	6.8	4.2	1.41	6.8	4.6	3.2	8.4	2.43	11.6	4.6	4.2	4.4	2.2	7.6	5.8	4.8	
	Other	12 Specialized purpose	2.44	1.78		0.16	0.12			0.15	0.3	0.1	0.13		1.01	0.08	0.48	0.01	0.08	1.23	0.53	0.78	0.06	0.13
	Packaging	13 Boxboard cardboard - single layer	4.08	9.4	2.03	17.2	4.2	17.2	3.4	3.2	4.2	7.4	4.4	3.8	2.8	4.6	5.2	4	3	6.4	9.8	13	3.72	
		14 Corrugated cardboard - multi layer - dry	12.6	1.82		6.6	1.8	11	3	3	0.16	3.6	1.35	4	0.77	9.2	0.92	5.4	0.98	3.4	8.6	5.6	2.8	
		15 Waxed corrugated cardboard - multi-layer	3.6			5.4						1.2								0.04				
		16 Fast-food boxboard	0.38	0.19		0.12	0.11	1.7	0.17	0.1	0.96	0.07	0.13	0.29	0.1	0.12	0.16	0.88	0.2	0.24	0.7	1.39	0.05	
		17 Fast-food wrap	0.12	0.04		0.09	0.69	0.21	0.06	0.03	0.03	0.15	0.03		0.06	0.61	0.04	0.01	0.14	0.01	0.08	0.23	0.03	
		18 Molded Pulp	0.78			0.8	0.15	1.02	0.42	0.36	0.24	0.44	0.35	0.07	0.17	0.71	0.23	0.22	0.39	0.65	0.94	0.86	0.46	
		19 Kraft paper bags/wrap	0.56	0.53	1.19	0.36	0.42	0.66	0.79	1.09	3.4	1.57	1	1.37	1.19	2.4	2.09	1.5	1.5	0.93	6.8	8	0.62	
		20 Laminated paper bags/boxboard		0.08		0.3	0.08	0.57	0.24	0.08	0.09	0.08	0.15			0.11	0.17	0.12	0.07	0.44	0.28	4.2	0.17	0.19
ORGANICS		Food Waste	21 Home/ICI food waste not in containers (see 24)	42	35.4	27.2	40.6	28.4	28.6	26.4	29.6	37.2	48	21.8	18.2	30.2	29.4	36.8	39	29	18.2	24.6	24.8	19.8
	Tissue	22 Facial tissue and gift wrapping paper tissue	6.57	19	5.2	21	5	10.2	7.6	8.6	9.4	12.6	9.2	7.6	8.2	8.2	6.2	9.6	7.2	4.6	12	11.4	12	
	Yard Waste	23 Home/ICI gardening, brush, leaves		3.2		0.58	3		5.8	4.2	1.9	12.2	1.62	19		4.4	0.61	0.57	4	3.2	1.44		4.8	
	Other	24 Food in containers, including weight of containers	3.4		6	6.2	18.6	5.8	10.8	14	6.4	7.4	6.2		17.4	11.04	3.6	4.2	5.8	3.8	14.8	4.8	3.7	
	Fibre	25 Wet paper and cardboard	1.82			0.19	0.73	0.43	2.18	0.04	1.56	2.8	3.07		0.42	0.85	1.84	0.47	0.33	0.13	0.72	0.94	0.67	
DAIRY	Beverage - Dairy milk only	26 Polycoat (gable top) - 1 litre and greater	0.12			1.55	0.52		0.26	0.43	0.09	0.36	0.3			0.07	0.24		0.23		0.04	0.04	0.07	
		27 Polycoat (gable top) - less than 1 litre	0.62	0.36		0.24	0.24	0.5	0.07	0.08	0.85	1.25	0.04			0.06	0.04	0.36		0.03	0.19	0.43	0.04	
		28 Plastic jug (HDPE - Number 2) - 1 litre and greater					0.03		0.1							0.09	0.11			0.18	0.22		0.03	
		29 Plastic jug (HDPE - Number 2) - less than 1 litre	0.65				0.09					0.13	0.08	0.02			0.03		0.22			0.2	0.05	0.02
		30 Tetra pak																						
	Ice Cream	31 Plastic bag (LDPE film - Number 4)																	0.04					
		32 Plastic container (HDPE - Number 2)		0.11		0.26	0.12			0.1						0.14	0.22				0.14		0.78	
	Other Dairy	33 Boxboard container (with lining)				0.02			0.06							0.19			0.22	0.23				
		34 Plastic container (HDPE - #2, PP - #5, PS - #6)																						
35 Plastic container (other than 2, 5 and 6)																								
Non-fluid Milk Product	36 Tetra pak																							
	37 Plastic film																							
NON-DAIRY	Beverage - Non-Dairy alternatives	38 Polycoat (gable top)		0.11																				
		39 Plastic container																						
	Foodstuffs	40 Tetra pak																						
		41 Tetra pak																					0.02	
PLASTIC	Food and other container packaging	42 PET - Number 1	2.49	1.41	1.47	0.64	0.77	1.45	1.27	0.81	1.61	0.94	1.32	0.31	0.33	0.64	0.58	1.42	1	1.18	1.6	1.37	0.65	
		43 HDPE - Number 2	1.24	3.4	0.93	1.25	1.05	2.4	1.42	0.66	1	1.6	1.15	0.75	0.41	1.08	0.9	1.09	0.99	0.8	2.22	1.86	0.76	
		44 PVC - Number 3	0.17	0.57		0.63	0.06			0.13	0.08	0.03				0.24	4.2	0.03	0.02	0.06	0.08	0.8	2.4	0.06
		45 LDPE - Number 4							0.04		0.01								0.15	0.04			0.03	
		46 PP - Number 5	0.62	0.49	0.39	0.21	0.34	0.46	0.92	0.4	0.52	0.46	0.27	0.04	0.2	0.38	0.29	0.7	0.62	0.72	0.96	0.49	0.35	
		47 PS - Number 6	8.2	7		0.61	3.4	1.62	4.77	1.41	5.6	2.6	2.16	9.6	3.8	8.2	3.8	6	2.8	3.4	5.2	3.8	2.8	

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	
		48 Other - Number 7						0.49		0.03					0.06	0.05	0.02		0.46	0.02	0.09	0.12		
		49 Non-numbered containers	2.06	3.8	1.39	3.6	2.6	1.73	3.2	1.28	2.6	3.8	3.4	3.4	3.4	3.2	1.81	1.85	1.84	2.6	2.8	3.2	3.2	
	Composite packaging	50	1.03	1.23	1.33		1.28	2.8	1.35	1.39	0.81	1.08	1.27	0.68	1.21	0.6	0.9	0.69	1.27	0.52	1.38	2.13	0.57	
	Plastic Bags/Film	51 LDPE - Number 4	0.13				0.45		0.17			0.03	0.49	0.04	0.43	0.1	0.14	0.19	0.01	1.66	0.02	0.04	0.02	0.11
		52 LDPE - Number 4 - not suitable for recovery	8.6	11	14.8	10.4	5.4	10.2	6	4.6	5.6	7.6	7.2	12	7.6	7.8	7.2	5.6	6.6	4.4	11.8	11	6.8	
		53 LDPE - Number 4 - Other bags, film packaging, wrap	18.4	8.4	25	10.6	5.2	10.6	5.8	4.4	6.2	11.8	5.4	5.8	8.6	20.6	6.4	7.2	5.8	5	15	14	4.8	
		54 PP - Number 5 - Agriculture																0.86	0.16					
	Non-packaging End-of-Life Products	55 Crates, pails and tubs	5.8	8.6			2	5.4	3.6	0.46	4.4	0.54			0.47	3.4	0.59	3.8	2.8	1.66	2.8	1.8	4.2	
		56 Consumer goods	1.12	2.13	1.55	4.4	2.48	8.6	5.6	7.4	4.2	1.2	3.2	2.95	6.4	3.2	6	4.6	9.4	3.8	1.72	5.4	5.2	
		57 Non-program electronic products/components		0.46			0.53								1.87	0.36						0.51	0.11	
		58 Non-program paint products												1.8	1.56				0.11					
		59 Non-Municipal Hazardous and Special Waste			24.6		0.21	3.4		0.31	1.65	0.02	1.64	7		1.76	0.65	0.44		0.34	0.45	1.62	0.29	
DISPOSABLE CUPS	Fibre	60 Disposable cups - branded - hot	1.44	2.24	0.53	1.89	1.42	2.2	0.83	2	1.64	2.6	1.17	1.24	1.07	1.49	1.22	1.54	1.92	1.8	5	4.8	1.4	
		61 Disposable cups - branded - cold	0.21	0.06	0.36	0.07	0.1	4	0.14	0.16	0.61	0.24	0.47	0.19	0.14	0.24	0.21	0.64	0.32	0.25	0.62	1.76	0.09	
		62 Disposable cups - other		0.11		0.04	0.02		0.06	0.07	0.06	0.02	0.02	0.1	0.02	0.03	0.04	0.21	0.01	0.39	0.14	0.22	0.08	
	Plastic	63 Single use - branded	0.24		0.14	0.09				0.04		0.03			0.17		0.02		0.02	0.06	0.08	0.06	0.05	
		64 Single use - non-branded	0.06		0.3	0.03	0.25	0.1	0.06	0.28	0.01	0.18	0.02	0.09	0.01	0.14	0.09	0.01	0.26	0.02	0.24	0.24	0.44	
GLASS	Food and Consumer Goods Packaging	65 Clear - food containers		0.54		2.6	0.31		0.94	1.09		0.33	0.43			1.24			0.91	0.5	0.37	0.61	0.6	
		66 Coloured - food containers																						
		67 Clear - non-food containers																						
		68 Coloured - non-food containers																						
	Automotive	69																						
	Other Products	70		1.35			1.61	2.8	1.43	5.4		0.27	0.6		1.65	0.87	1.21		3.6	0.74	0.49	1.34	0.57	
METAL	Food and Consumer Goods Packaging	71 Aluminum food containers											0.02			0.12			0.14					
		72 Aluminum - other	2.78	0.6		0.77	1.09	0.43	1.09	0.37	0.54	0.41	1.06	0.76	1.09	0.62	0.66	0.35	0.3	0.78	1.02	0.18	0.49	
		73 Steel food containers	0.47	1.26		0.46	1.57	3.8	1.27	0.76		0.81	0.7		0.35	0.25	1.08		1.16	0.54	0.36	1.73	0.78	
		74 Steel composite containers		0.27		0.17	0.18		0.49	0.29	0.04	0.03	0.19		0.25	0.17	0.06	0.03	2.12	0.24		0.05	0.31	
		75 Steel - other	1.95	5		0.54	0.71	7	0.63	5.8	6.2	0.16	1.76	6.7	2.34	0.62	2.8	5.6	3.4	0.94	0.84	2.29	2.28	
	Non-Paint Program Pressurized Containers	76 Aluminum									0.15				0.38			0.2	0.03					
		77 Steel		0.81						0.04	0.44	0.15		0.33	0.45	0.14	0.08	0.14	0.28	0.36		0.05	0.22	
	Non-Electronics Program items	78 Appliances - small		0.22			5.4		6.2				0.28		0.18		0.54		2.4	1.92			1.92	
		79 Appliances - large																						
		80 Electronics - small																						
		81 Electronics - large																						
	Other	82 Extension cords and wire of uncertain materials	0.36					0.27					1.45			1.39	0.19	1.6			0.11	0.08	0.03	
Municipal Hazardous and Special Waste (MHSW)	Pressurized gas containers	83 Non-refillable																						
		84 Re-fillable																						
	Marine flares	85 by symbol or container type																						
	Mercury containing products	86 by symbol or container type																						
	Batteries	87 Non-rechargeable		3.2			0.24		0.17	0.1	0.3	0.23	0.09		0.41	0.17	0.1	0.12	0.2			0.02	0.11	
		88 Rechargeable																						
		89 Lithium-ion																	0.16					
	Sharps and Pharmaceuticals	90 None									0.06						0.04							
	Pesticides and their containers	91 PCA regulated products																						
		92 Non-PCA regulated products		0.82									0.37					0.04						
	Automotive fluid containers	93 HDPE - Number 2	0.24	0.38					0.04	0.14	0.96	0.3	0.14	0.08	0.34	0.16	0.07	0.03	0.19	0.39				
		94 PP - Number 5																						

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	
		95 Other												0.58						0.05				
	Other fluids, fuel, lubricants & containers	96 HDPE - Number 2							0.13		0.27	0.04				0.18			0.63				0.06	
		97 Other		0.4			0.37			1.76	0.03	0.79		0.76	0.15									
	Solvents and containers	98												0.86										
	Corrosives and containers (Crankshaft) oil filters	99												3.37	0.61								0.04	
	Oily rags	101																						
TEXTILES	Fabric	102 Clothing	7.2	18			4.8	10.8	3.8	6.2	18	13	18.2		9.4	13.6	10.6	22.2	7.2	10.6	14.2	11.4	4.8	
		103 Household use	0.87	3		3.2	0.03		0.1	6.6	0.8	0.08	0.04			8.2	1.58	2.6	1.69	2.3	0.26	1.51	2.42	
	Footwear	104				1.6	7.8	0.57	1.35	2.4	0.99	2.6	1.53		1.3	0.84	0.72	1.89	5.6	1.82			0.33	
	Other	105	1.15	2.4	2.79	0.64	4.2	13.6	1.92	3.6	3.2	2.4	2.4	8.2	2	6.8	1.4	0.28	3.68	0.38	0.35	4.6	0.92	
C&D	Wood	106 dimensional - clean	0.44	1.49			2.8	2.2	3.8		1.48	6.6	0.27	13.8	0.5	2.2	3.2	1.46	0.38	7.6	0.13	4.6	3.8	
		107 dimensional - coated											0.77		0.26	4.6	0.4		0.19				0.3	
		108 engineered/composite - clean						4		0.52	3.6	2.4	0.61			0.42	5.2	0.53	1.72		1.42	1.45		
		109 engineered/composite - coated					0.79		2.36	0.07	0.9	1.11			1.2	0.8	0.28		0.16	0.7	2			
		110 pressure-treated	13.8	4.2															4.2	4				
	Wallboard and coverings	111 drywall - clean					0.58				5.6	2.8	0.92	37.6		0.72	4		1.45					
		112 drywall - coated																						
	Shingles	113 asphalt	3.8												0.68			1.16	0.54					
		114 other																						
	Flooring	115 carpet				1.29		1.27	1.19								0.76						2.8	
		116 other									2.2									2.8				
	Insulation	117 fibreglass		2.53										8.8										
		118 foam (PS)									3.6		0.41											
		119 other																						
	Glass	120 window/door																						
		121 decorative																						
	Countertops	122 laminate																						
		123 slate/marble																						
	Ceiling Tile	124 None																						
BULKY ITEMS	Furniture	125 mattresses - coil						7.8																
		126 mattresses - foam																						
		127 mattresses - futon																						
		128 box spring																						
		129 upholstered - seating										1.42				1.46			2.6					
		130 solid wood																7.4			3.43			
		131 engineered/laminate wood	4.8																	1.71				
		132 other (non-plastic)																						
SPECIAL CARE WASTE	Diapers	133		30.2	69.4	43.8	11.8	4.2	4.6	3	27.8	0.84	17.6		14.8	5.4	5.6	30.2	5.2	1.08	4.4	9	11.2	
	Other	134 Medical gloves, pharmaceuticals, cosmetics	2.73	1.69	6.6	8	0.14	2.6	0.42	0.73	4	1.48	1.2	0.29	1.46	1.28	2.44	4.4	0.14	0.38	3.2	4	7.8	
REDEEMABLE CONTAINERS	Beverage	135 Sort 1 - Aluminum cans	0.42	0.14	0.28	0.08	0.59	0.49	0.58	0.19	0.76	0.53	1.01	0.13	0.19	0.48	0.95	0.85	0.5	0.2	0.61	0.79	0.44	
		136 Sort 2 - Glass - clear									0.38	0.15	0.52			0.16	0.35		0.23	0.44			1.08	
		137 Sort 3 - PET - clear	0.39	0.15	0.09	0.25	1.45	1.72	1.06	0.36	1.19	1.3	0.85	0.14		1.05	1.36	1.56	0.78	0.72	1.49	1.7	0.56	
		138 Sort 4 - Glass -coloured									0.09	0.82						0.03						
		139 Sort 5 - PET - green					0.12	0.1	0.09	0.04		0.36	0.21			0.18	0.19	0.02	0.11	0.11	0.16	0.16	0.11	
		140 Sort 6 - Other plastic (3, 5, 6 &7)			0.19														0.14					
		141 Sort 8 - Steel cans				0.23				0.1	0.09						1.03							

RRFB Waste Audit Data (2011)

Landfill (read across)

Sample collection point (read across)

Source (residential vs ICI)
Sample serial number

MATERIAL CATEGORY	SUB-CATEGORY	SEPARATION OF SUB-CATEGORIES	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT	WEIGHT
		142 Sort 9 - Gable top		0.37		0.16						0.17	0.02	0.17			0.04		0.05				
		143 Sort 10 - Tetra pak	0.53		0.58	0.23	0.24	0.28	0.19	0.14	0.45	0.3	0.24		0.11	0.32	0.19	0.46	0.25	0.29	0.12	0.26	0.1
		144 Sort 11 - HDPE - translucent					0.04		0.12					0.21									0.06
		145 Sort 13 - PET - blue						0.42														0.12	
		146 Sort 21 - Glass - clear (over 500 ml)											0.62				0.78						
		147 Sort 22 - Glass - coloured (over 500 ml)	0.8																				
		148 Sort 23 - Liquor PET - clear and coloured (over 500 ml)					0.49						0.42			0.28							
		149 Sort 24 - Liquor PET - clear and coloured											0.26										
		150 Sort 25 - Liquor - other																					
		151 Sort 26 - Liquor - other (over 500 ml)																					
REGULATED PAINT	Empty plastic	152																					
	Empty metal	153	1.58							0.44	2.23	0.45		2.2	2.2	0.77	0.36	1.6	0.48				
	Empty aerosols	154																					
REGULATED TIRES	Passenger and Light Truck	155																					
	Tractor Trailer	156																					
OFF-ROAD TIRES	Non-Tire Program items	157 Small																					
		158 Large																					
REGULATED ELECTRONICS	Computers	159 Desktop																					
		160 Portable										2.6											
	Computer Peripherals	161										0.39			0.25								
	Desktop Printers	162															0.3						
	Display Devices	163																					
	Personal/Portable A/V Systems	164									1.2			1.11		0.04	1.76						
	Vehicle A/V Systems	165																					
	Home Theatre in a Box	166																					
	Home Audio/Video Systems	167					0.39																
	Non-cellular telephones	168												0.49									
	Cellular telephones	169											0.08										
			201.29	207.26	202.16	205.92	140.2	216.37	137.74	134.82	201.36	198.46	139.67	199.21	139.52	200.06	137.25	199.8	136.27	135.55	200.86	197.28	135.17

APPENDIX E

Statistical Analysis – All Categories for 2011 Waste Audit Project

RRFB 2011 Waste Audit Study
Statistical Analysis

ICI

MATERIAL CATEGORY			Colchester				Cumberland				Guysborough			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
FIBRE	Uncoated Paper - newsprint quality	1 Dailies	3.0981	0.0000	0.0000	6	0.8709	0.7854	0.7484	6	0.5697	0.5331	0.5080	6
FIBRE		2 Weeklies	0.0619	1.6281	1.5514	6	0.0265	0.0461	0.0440	6	0.0260	0.0414	0.0394	6
FIBRE		3 Magazines - uncoated	0.0305	0.3325	0.3168	6	0.0000	0.0000	0.0000	6	0.0118	0.0303	0.0289	6
FIBRE		4 Flyers/inserts - uncoated	0.2920	0.1956	0.1864	6	0.6759	0.5860	0.5584	6	0.6219	0.4132	0.3938	6
FIBRE		5 Telephone Books/Yellow Pages	0.0000	0.0621	0.0592	6	0.0951	0.2445	0.2329	6	0.0000	0.0000	0.0000	6
FIBRE	Coated Paper - catalogue quality	6 Magazines - glossy	0.3537	0.4786	0.4560	6	0.0000	0.0000	0.0000	6	0.3759	0.4253	0.4053	6
FIBRE		7 Catalogues/Calendars	0.1782	0.5146	0.4903	6	0.3050	0.4075	0.3883	6	0.5715	1.3215	1.2593	6
FIBRE		8 Flyers/inserts - glossy	0.2415	0.1483	0.1413	6	0.0668	0.0721	0.0687	6	0.4956	0.2841	0.2708	6
FIBRE	Books	9 Hard cover	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.2238	0.5754	0.5483	6
FIBRE		10 Soft cover	0.3585	0.0382	0.0364	6	0.2306	0.3223	0.3071	6	0.0572	0.1471	0.1402	6
FIBRE	Mixed Fines	11 None	2.3950	0.1063	0.1013	6	3.0841	3.3153	3.1591	6	4.4532	3.1040	2.9578	6
FIBRE	Other	12 Specialized purpose	0.1129	0.1176	0.1121	6	0.0387	0.0382	0.0364	6	0.5666	0.6745	0.6427	6
FIBRE	Packaging	13 Boxboard cardboard - single layer	3.0379	0.0000	0.0000	6	2.3240	1.2311	1.1731	6	2.3090	0.9179	0.8747	6
FIBRE		14 Corrugated cardboard - multi layer - dry	3.2383	0.0191	0.0182	6	1.6852	2.9608	2.8214	6	3.2995	3.8951	3.7116	6
FIBRE		15 Waxed corrugated cardboard - multi-layer	0.0000	0.0000	0.0000	6	0.4772	0.9538	0.9089	6	0.0000	0.0000	0.0000	6
FIBRE		16 Fast-food boxboard	0.0280	0.0000	0.0000	6	0.3712	0.2210	0.2106	6	0.0697	0.0519	0.0494	6
FIBRE		17 Fast-food wrap	0.0453	0.2086	0.1988	6	0.0139	0.0262	0.0249	6	0.1578	0.2410	0.2297	6
FIBRE		18 Molded Pulp	0.1474	0.0000	0.0000	6	0.1022	0.0780	0.0744	6	0.3275	0.1926	0.1835	6
FIBRE		19 Kraft paper bags/wrap	0.4825	0.0000	0.0000	6	1.6244	1.7714	1.6880	6	0.8068	0.5924	0.5645	6
FIBRE		20 Laminated paper bags/boxboard	0.0420	0.0000	0.0000	6	0.0338	0.0316	0.0301	6	0.0808	0.1144	0.1090	6
ORGANICS	Food Waste	21 Home/ICI food waste not in containers (see 24)	31.0533	0.1884	0.1795	6	16.1119	6.5494	6.2408	6	12.0192	8.1404	7.7569	6
ORGANICS	Tissue	22 Facial tissue and gift wrapping paper tissue	4.9742	0.0971	0.0926	6	4.6619	0.2011	0.1916	6	5.9728	4.0301	3.8402	6
ORGANICS	Yard Waste	23 Home/ICI gardening, brush, leaves	4.1776	0.0000	0.0000	6	0.8225	1.5316	1.4594	6	1.4032	1.8839	1.7951	6
ORGANICS	Other	24 Food in containers, including weight of containers	2.6283	0.0000	0.0000	6	2.1196	2.1308	2.0304	6	3.3212	3.6368	3.4655	6
ORGANICS	Fibre	25 Wet paper and cardboard	1.8146	0.0000	0.0000	6	0.3499	0.4940	0.4708	6	0.4773	0.5679	0.5412	6
DAIRY	Beverage - Dairy milk only	26 Polycoat (gable top) - 1 litre and greater	0.1830	0.0000	0.0000	6	0.1541	0.2913	0.2775	6	0.1164	0.1845	0.1758	6
DAIRY		27 Polycoat (gable top) - less than 1 litre	0.4145	0.0000	0.0000	6	0.3759	0.6110	0.5822	6	0.0899	0.0902	0.0860	6
DAIRY		28 Plastic jug (HDPE - Number 2) - 1 litre and greater	0.0197	0.0000	0.0000	6	0.0364	0.0935	0.0891	6	0.0214	0.0371	0.0354	6
DAIRY		29 Plastic jug (HDPE - Number 2) - less than 1 litre	0.0067	0.5613	0.5348	6	0.0538	0.0508	0.0484	6	0.0141	0.0182	0.0173	6
DAIRY		30 Tetra pak	0.0000	0.1508	0.1437	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		31 Plastic bag (LDPE film - Number 4)	0.0000	1.1787	1.1232	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY	Ice Cream	32 Plastic container (HDPE - Number 2)	0.4407	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0548	0.0962	0.0917	6
DAIRY		33 Boxboard container (with lining)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0058	0.0149	0.0142	6
DAIRY	Other Dairy	34 Plastic container (HDPE - #2, PP - #5, PS - #6)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		35 Plastic container (other than 2, 5 and 6)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		36 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY	Non-fluid Milk Product	37 Plastic film	0.0000	0.0382	0.0364	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY	Beverage - Non-Dairy	38 Polycoat (gable top)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Colchester				Cumberland				Guysborough			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
NON-DAIRY	alternatives	39 Plastic container	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY		40 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY	Foodstuffs	41 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0033	0.0085	0.0081	6
PLASTIC	Food and other container packaging	42 PET - Number 1	0.3220	0.3282	0.3127	6	0.8281	0.4524	0.4311	6	0.2603	0.2154	0.2053	6
PLASTIC		43 HDPE - Number 2	0.8163	0.3931	0.3746	6	0.5074	0.2006	0.1912	6	0.6141	0.4012	0.3823	6
PLASTIC		44 PVC - Number 3	0.0000	0.0432	0.0411	6	0.0139	0.0239	0.0227	6	1.0940	1.7528	1.6703	6
PLASTIC		45 LDPE - Number 4	0.0190	0.0000	0.0000	6	0.0049	0.0102	0.0098	6	0.0000	0.0000	0.0000	6
PLASTIC		46 PP - Number 5	0.1400	0.2117	0.2017	6	0.2299	0.1579	0.1505	6	0.1751	0.1822	0.1736	6
PLASTIC		47 PS - Number 6	1.1396	0.9575	0.9124	6	2.8601	1.5821	1.5076	6	1.7958	1.2658	1.2061	6
PLASTIC		48 Other - Number 7	0.0000	0.0217	0.0207	6	0.0000	0.0000	0.0000	6	0.0489	0.0964	0.0918	6
PLASTIC		49 Non-numbered containers	1.2474	0.9987	0.9517	6	1.0373	0.6659	0.6346	6	1.7055	0.4413	0.4205	6
PLASTIC	Composite packaging	50	0.4167	0.2802	0.2670	6	0.3374	0.1327	0.1265	6	0.2189	0.0819	0.0780	6
PLASTIC	Plastic Bags/Film	51 LDPE - Number 4	0.2553	0.0808	0.0770	6	0.0107	0.0110	0.0105	6	0.0539	0.0336	0.0321	6
PLASTIC		52 LDPE - Number 4 - not suitable for recovery	3.7491	3.4522	3.2896	6	3.4690	1.8656	1.7777	6	4.0571	1.1481	1.0940	6
PLASTIC		53 LDPE - Number 4 - Other bags, film packaging, wrap	5.2279	1.7946	1.7100	6	4.0600	1.8955	1.8062	6	3.7040	3.6466	3.4748	6
PLASTIC		54 PP - Number 5 - Agriculture	0.0000	0.2869	0.2734	6	0.8153	1.8831	1.7944	6	0.0050	0.0128	0.0122	6
PLASTIC	Non-packaging End-of-Life Products	55 Crates, pails and tubs	0.1932	0.2721	0.2592	6	1.7214	0.9086	0.8658	6	0.8592	0.9089	0.8661	6
PLASTIC		56 Consumer goods	0.4950	0.8773	0.8360	6	2.0265	0.4550	0.4336	6	2.9809	2.9725	2.8325	6
PLASTIC		57 Non-program electronic products/components	0.0025	0.3747	0.3571	6	0.0000	0.0000	0.0000	6	0.1519	0.1635	0.1558	6
PLASTIC		58 Non-program paint products	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.6220	1.5989	1.5236	6
PLASTIC		59 Non-Municipal Hazardous and Special Waste	0.0652	0.9718	0.9260	6	0.5607	0.3970	0.3783	6	2.6593	4.3034	4.1007	6
DISP. CUPS	Fibre	60 Disposable cups - branded - hot	0.8331	0.4237	0.4037	6	0.6313	0.3696	0.3522	6	1.0363	0.8765	0.8352	6
DISP. CUPS		61 Disposable cups - branded - cold	0.0815	0.1291	0.1231	6	0.2288	0.1945	0.1853	6	0.0803	0.0357	0.0340	6
DISP. CUPS		62 Disposable cups - other	0.1736	0.0127	0.0121	6	0.0841	0.1258	0.1198	6	0.1213	0.2091	0.1993	6
DISP. CUPS	Plastic	63 Single use - branded	0.0140	0.0494	0.0470	6	0.0000	0.0000	0.0000	6	0.0117	0.0213	0.0203	6
DISP. CUPS		64 Single use - non-branded	0.0099	0.0814	0.0775	6	0.1207	0.2229	0.2124	6	0.1283	0.1911	0.1821	6
GLASS	Food and Consumer Goods Packaging	65 Clear - food containers	0.1581	0.5925	0.5646	6	0.0000	0.0000	0.0000	6	0.2526	0.4207	0.4009	6
GLASS		66 Coloured - food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS		67 Clear - non-food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS		68 Coloured - non-food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS	Automotive	69	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS	Other Products	70	0.2853	1.4624	1.3935	6	0.0000	0.0000	0.0000	6	0.5177	0.5391	0.5137	6
METAL	Food and Consumer Goods Packaging	71 Aluminum food containers	0.0000	0.0146	0.0139	6	0.0000	0.0000	0.0000	6	0.0100	0.0257	0.0245	6
METAL		72 Aluminum - other	0.1243	0.3187	0.3036	6	0.2216	0.2412	0.2298	6	0.2413	0.2874	0.2739	6
METAL		73 Steel food containers	0.3030	0.3960	0.3773	6	0.0000	0.0000	0.0000	6	0.1959	0.3390	0.3230	6
METAL		74 Steel composite containers	0.0115	0.1582	0.1507	6	0.0189	0.0320	0.0305	6	0.0540	0.0731	0.0697	6
METAL		75 Steel - other	0.3235	1.1915	1.1354	6	2.3894	1.3510	1.2874	6	0.3532	0.4712	0.4490	6
METAL	Non-Paint Program	76 Aluminum	0.0706	0.0185	0.0176	6	0.0539	0.0669	0.0638	6	0.0083	0.0213	0.0203	6
METAL	Pressurized	77 Steel	0.0372	0.0648	0.0617	6	0.1924	0.2143	0.2042	6	0.1359	0.2486	0.2369	6

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MATERIAL CATEGORY			Colchester				Cumberland				Guysborough			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
METAL	Non-Electronics Program items	78 Appliances - small	0.0528	0.9747	0.9288	6	0.1328	0.2322	0.2212	6	0.1477	0.3355	0.3197	6
METAL		79 Appliances - large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL		80 Electronics - small	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL		81 Electronics - large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL	Other	82 Extension cords and wire of uncertain materials	0.8472	1.0271	0.9787	6	0.7139	1.4168	1.3500	6	0.1674	0.3007	0.2865	6
MHSW	Pressurized gas containers	83 Non-refillable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		84 Re-fillable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Marine flares	85 by symbol or container type	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Mercury containing products	86 by symbol or container type	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Batteries	87 Non-rechargeable	0.0642	0.4300	0.4098	6	0.1316	0.2135	0.2034	6	0.0249	0.0411	0.0392	6
MHSW		88 Rechargeable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		89 Lithium-ion	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Sharps and Pharmaceuticals	90 None	0.0000	0.0643	0.0612	6	0.0277	0.0573	0.0546	6	0.0182	0.0469	0.0447	6
MHSW	Pesticides and their containers	91 PCA regulated products	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		92 Non-PCA regulated products	0.0000	0.0000	0.0000	6	0.0245	0.0631	0.0601	6	0.0000	0.0000	0.0000	6
MHSW	Automotive fluid containers	93 HDPE - Number 2	0.2799	0.1907	0.1817	6	0.0434	0.0649	0.0618	6	0.0557	0.0746	0.0711	6
MHSW		94 PP - Number 5	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		95 Other	0.0000	0.3573	0.3405	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Other fluids, fuel, lubricants &	96 HDPE - Number 2	0.0946	0.0513	0.0489	6	0.0000	0.0000	0.0000	6	0.0150	0.0385	0.0367	6
MHSW		97 Other	0.2527	0.0000	0.0000	6	0.0106	0.0206	0.0196	6	0.0058	0.0149	0.0142	6
MHSW	Solvents and containers	98	0.0305	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Corrosives and containers	99	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	(Crankshaft) oil filters	100	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Oily rags	101	0.0669	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
TEXTILES	Fabric	102 Clothing	6.0035	5.2384	4.9916	6	12.9205	7.8848	7.5133	6	11.3336	7.1374	6.8012	6
TEXTILES		103 Household use	0.1039	0.5992	0.5710	6	1.0604	1.2568	1.1976	6	3.5108	3.3741	3.2152	6
TEXTILES	Footwear	104	0.1250	1.2592	1.1999	6	1.0553	1.9751	1.8821	6	0.6724	0.9093	0.8664	6
TEXTILES	Other	105	1.1617	1.2893	1.2285	6	2.1084	1.9251	1.8344	6	2.7952	1.6658	1.5874	6
C&D	Wood	106 dimensional - clean	3.8024	0.1646	0.1568	6	1.0501	0.7538	0.7183	6	0.8970	1.8006	1.7158	6
C&D		107 dimensional - coated	0.0000	0.4417	0.4209	6	0.0000	0.0000	0.0000	6	0.9787	1.5593	1.4859	6
C&D		108 engineered/composite - clean	1.2847	0.4207	0.4009	6	1.5664	1.4090	1.3426	6	0.0000	0.0000	0.0000	6
C&D		109 engineered/composite - coated	0.1160	0.1419	0.1352	6	0.3905	0.7251	0.6909	6	1.5207	1.9056	1.8158	6
C&D		110 pressure-treated	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Wallboard and coverings	111 drywall - clean	1.6055	0.6833	0.6511	6	1.9676	1.7770	1.6933	6	0.7111	1.3504	1.2868	6
C&D		112 drywall - coated	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Colchester				Cumberland				Guysborough			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
C&D	Shingles	113 asphalt	0.0000	0.0000	0.0000	6	0.3618	0.6770	0.6451	6	0.0000	0.0000	0.0000	6
C&D		114 other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Flooring	115 carpet	0.0000	0.0000	0.0000	6	0.0634	0.1630	0.1553	6	1.6596	3.3486	3.1909	6
C&D		116 other	1.9530	0.0000	0.0000	6	0.1821	0.4681	0.4460	6	0.0000	0.0000	0.0000	6
C&D	Insulation	117 fibreglass	1.4473	0.0000	0.0000	6	1.2065	1.9704	1.8776	6	0.0000	0.0000	0.0000	6
C&D		118 foam (PS)	0.3294	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.1769	0.3174	0.3024	6
C&D		119 other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Glass	120 window/door	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		121 decorative	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Countertops	122 laminate	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		123 slate/marble	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Ceiling Tile	124 None	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS	Furniture	125 mattresses - coil	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		126 mattresses - foam	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		127 mattresses - futon	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		128 box spring	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		129 upholstered - seating	0.2682	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.1990	0.5117	0.4876	6
BULKY ITEMS		130 solid wood	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		131 engineered/laminate wood	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		132 other (non-plastic)	0.0000	0.0000	0.0000	6	0.6951	1.7867	1.7025	6	0.0000	0.0000	0.0000	6
SP. CARE WASTE	Diapers	133	0.8669	4.3849	4.1783	6	10.5403	8.9978	8.5739	6	6.1758	6.1701	5.8795	6
SP. CARE WASTE	Other	134 Medical gloves, pharmaceuticals, cosmetics	0.5155	0.7983	0.7607	6	1.4766	1.2788	1.2185	6	3.3974	6.2981	6.0014	6
RED. CONTAINERS	Beverage	135 Sort 1 - Aluminum cans	0.2134	0.5598	0.5334	6	0.4939	0.3535	0.3368	6	0.1241	0.1091	0.1039	6
RED. CONTAINERS		136 Sort 2 - Glass - clear	0.0469	0.2312	0.2203	6	0.0916	0.1595	0.1520	6	0.0133	0.0343	0.0327	6
RED. CONTAINERS		137 Sort 3 - PET - clear	0.4505	0.4154	0.3958	6	0.6957	0.3315	0.3159	6	0.2477	0.2073	0.1975	6
RED. CONTAINERS		138 Sort 4 - Glass -coloured	0.2711	0.0000	0.0000	6	0.0376	0.0684	0.0652	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		139 Sort 5 - PET - green	0.1087	0.1092	0.1041	6	0.0081	0.0163	0.0155	6	0.0283	0.0383	0.0365	6
RED. CONTAINERS		140 Sort 6 - Other plastic (3, 5, 6 &7)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		141 Sort 8 - Steel cans	0.0149	0.0000	0.0000	6	0.1202	0.2135	0.2035	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		142 Sort 9 - Gable top	0.0560	0.0201	0.0191	6	0.0000	0.0000	0.0000	6	0.0066	0.0171	0.0163	6
RED. CONTAINERS		143 Sort 10 - Tetra pak	0.1120	0.1127	0.1074	6	0.2210	0.1263	0.1204	6	0.0900	0.0683	0.0651	6
RED. CONTAINERS		144 Sort 11 - HDPE - translucent	0.0000	0.0000	0.0000	6	0.0298	0.0767	0.0730	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		145 Sort 13 - PET - blue	0.0074	0.0000	0.0000	6	0.0016	0.0042	0.0040	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		146 Sort 21 - Glass - clear (over 500 ml)	0.0000	0.3952	0.3766	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		147 Sort 22 - Glass - coloured (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		148 Sort 23 - Liquor PET - clear and coloured (over 500 ml)	0.1697	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0233	0.0600	0.0571	6
RED. CONTAINERS		149 Sort 24 - Liquor PET - clear and coloured	0.0000	0.6444	0.6141	6	0.0000	0.0000	0.0000	6	0.1161	0.2985	0.2844	6
RED. CONTAINERS		150 Sort 25 - Liquor - other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		151 Sort 26 - Liquor - other (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Colchester				Cumberland				Guysborough			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
REGULATED PAINT	Empty plastic	152	0.0733	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REGULATED PAINT	Empty metal	153	0.0378	0.0000	0.0000	6	0.9484	1.4457	1.3776	6	0.5152	0.8884	0.8466	6
REGULATED PAINT	Empty aerosols	154	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REGULATED TIRES	Passenger and Light Truck	155	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.6971	1.7920	1.7076	6
REGULATED TIRES	Tractor Trailer	156	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES	Non-Tire Program items	157 Small	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.3154	0.8107	0.7725	6
OFF-ROAD TIRES		158 Large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Computers	159 Desktop	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS		160 Portable	0.2183	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.1303	0.3349	0.3192	6
REG. ELECTRONICS	Computer Peripherals	161	0.1037	0.4418	0.4210	6	0.0000	0.0000	0.0000	6	0.0208	0.0535	0.0510	6
REG. ELECTRONICS	Desktop Printers	162	0.4585	0.0000	0.0000	6	0.0091	0.0234	0.0223	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Display Devices	163	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Personal/Portable A/V Systems	164	0.0000	0.0000	0.0000	6	0.4781	0.6113	0.5825	6	0.0480	0.1233	0.1175	6
REG. ELECTRONICS	Vehicle A/V Systems	165	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Theatre in a Box	166	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Audio/Video Systems	167	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.4313	1.1086	1.0564	6
REG. ELECTRONICS	Non-cellular telephones	168	0.0149	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0396	0.1017	0.0969	6
REG. ELECTRONICS	Cellular telephones	169	0.0000	0.0914	0.0871	6	0.0000	0.0000	0.0000	6	0.0135	0.0346	0.0330	6

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MATERIAL CATEGORY			Kaizer Meadow				Otter Lake				Queens			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
FIBRE	Uncoated Paper - newsprint quality	1 Dailies	0.2304	0.2766	0.2636	6	2.3864	1.0811	1.0301	6	0.6519	0.5281	0.5032	6
FIBRE		2 Weeklies	0.0000	0.0000	0.0000	6	0.0882	0.1683	0.1604	6	0.0000	0.0000	0.0000	6
FIBRE		3 Magazines - uncoated	0.0000	0.0000	0.0000	6	0.0426	0.0655	0.0625	6	0.1262	0.2181	0.2078	6
FIBRE		4 Flyers/inserts - uncoated	0.2897	0.4050	0.3860	6	1.0724	1.5022	1.4315	6	0.2732	0.2845	0.2711	6
FIBRE		5 Telephone Books/Yellow Pages	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
FIBRE	Coated Paper - catalogue quality	6 Magazines - glossy	0.0980	0.1651	0.1573	6	0.8248	0.6387	0.6086	6	0.1052	0.2705	0.2577	6
FIBRE		7 Catalogues/Calendars	0.0595	0.1253	0.1194	6	0.7013	1.1832	1.1275	6	0.1948	0.2256	0.2149	6
FIBRE		8 Flyers/inserts - glossy	0.1430	0.1171	0.1115	6	0.1372	0.0720	0.0686	6	0.1727	0.1733	0.1652	6
FIBRE	Books	9 Hard cover	0.1628	0.2650	0.2525	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
FIBRE		10 Soft cover	0.3703	0.8783	0.8370	6	0.6330	0.8531	0.8129	6	0.1188	0.1484	0.1414	6
FIBRE	Mixed Fines	11 None	1.9146	1.2107	1.1536	6	3.3966	1.2205	1.1630	6	3.0753	3.3412	3.1838	6
FIBRE	Other	12 Specialized purpose	0.4481	0.4049	0.3858	6	0.0402	0.0596	0.0568	6	0.2412	0.2866	0.2731	6
FIBRE	Packaging	13 Boxboard cardboard - single layer	2.7445	0.9829	0.9366	6	5.3789	2.1424	2.0415	6	4.4176	2.3941	2.2813	6
FIBRE		14 Corrugated cardboard - multi layer - dry	3.0201	3.5796	3.4109	6	2.1975	1.7784	1.6946	6	5.3298	5.2736	5.0252	6
FIBRE		15 Waxed corrugated cardboard - multi-layer	0.0000	0.0000	0.0000	6	0.7098	1.4940	1.4236	6	0.4371	1.1235	1.0706	6
FIBRE		16 Fast-food boxboard	0.1298	0.0921	0.0878	6	0.5201	0.3593	0.3424	6	0.4533	0.6847	0.6525	6
FIBRE		17 Fast-food wrap	0.3726	0.7934	0.7560	6	0.1646	0.1756	0.1673	6	0.1529	0.1673	0.1594	6
FIBRE		18 Molded Pulp	0.3054	0.3132	0.2985	6	0.5011	0.1614	0.1538	6	0.5181	0.2848	0.2714	6
FIBRE		19 Kraft paper bags/wrap	1.3704	1.9196	1.8292	6	2.6377	3.7977	3.6188	6	1.1166	1.0484	0.9990	6
FIBRE		20 Laminated paper bags/boxboard	0.0478	0.1042	0.0993	6	0.0583	0.1115	0.1063	6	0.0586	0.0694	0.0661	6
ORGANICS	Food Waste	21 Home/ICI food waste not in containers (see 24)	17.6763	5.6385	5.3729	6	10.6388	7.7629	7.3972	6	15.9895	3.1560	3.0073	6
ORGANICS	Tissue	22 Facial tissue and gift wrapping paper tissue	5.6164	2.6432	2.5187	6	9.7394	5.8188	5.5447	6	7.6662	2.1322	2.0318	6
ORGANICS	Yard Waste	23 Home/ICI gardening, brush, leaves	2.4412	3.9353	3.7499	6	0.0000	0.0000	0.0000	6	1.6310	3.1080	2.9616	6
ORGANICS	Other	24 Food in containers, including weight of containers	3.7348	4.0398	3.8495	6	1.9786	1.7874	1.7032	6	6.5126	3.4811	3.3172	6
ORGANICS	Fibre	25 Wet paper and cardboard	1.7423	2.5841	2.4623	6	0.3965	0.5648	0.5382	6	3.7621	5.8932	5.6155	6
DAIRY	Beverage - Dairy milk only	26 Polycoat (gable top) - 1 litre and greater	0.0936	0.1573	0.1499	6	0.0285	0.0442	0.0421	6	0.2415	0.2894	0.2758	6
DAIRY		27 Polycoat (gable top) - less than 1 litre	0.0961	0.1459	0.1390	6	0.2126	0.2627	0.2503	6	0.3981	0.8644	0.8237	6
DAIRY		28 Plastic jug (HDPE - Number 2) - 1 litre and greater	0.0300	0.0771	0.0735	6	0.0000	0.0000	0.0000	6	0.0789	0.0761	0.0726	6
DAIRY		29 Plastic jug (HDPE - Number 2) - less than 1 litre	0.0290	0.0474	0.0452	6	0.0245	0.0510	0.0486	6	0.0577	0.0950	0.0905	6
DAIRY		30 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		31 Plastic bag (LDPE film - Number 4)	0.0000	0.0000	0.0000	6	0.0032	0.0083	0.0079	6	0.0000	0.0000	0.0000	6
DAIRY	Ice Cream	32 Plastic container (HDPE - Number 2)	0.0462	0.0610	0.0581	6	0.0000	0.0000	0.0000	6	0.0210	0.0541	0.0515	6
DAIRY		33 Boxboard container (with lining)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY	Other Dairy	34 Plastic container (HDPE - #2, PP - #5, PS - #6)	0.0130	0.0334	0.0318	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		35 Plastic container (other than 2, 5 and 6)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		36 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY	Non-fluid Milk Product	37 Plastic film	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY	Beverage - Non-Dairy	38 Polycoat (gable top)	0.0088	0.0227	0.0217	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Kaizer Meadow				Otter Lake				Queens			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
NON-DAIRY	alternatives	39 Plastic container	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY		40 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY	Foodstuffs	41 Tetra pak	0.0000	0.0000	0.0000	6	0.0065	0.0166	0.0159	6	0.0000	0.0000	0.0000	6
PLASTIC	Food and other container packaging	42 PET - Number 1	0.3742	0.2343	0.2233	6	0.8194	0.5157	0.4914	6	0.2888	0.1023	0.0975	6
PLASTIC		43 HDPE - Number 2	0.5967	0.5722	0.5453	6	0.8871	0.5714	0.5445	6	0.3911	0.2372	0.2260	6
PLASTIC		44 PVC - Number 3	0.0727	0.1125	0.1072	6	0.7897	1.1807	1.1251	6	0.0782	0.1230	0.1172	6
PLASTIC		45 LDPE - Number 4	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
PLASTIC		46 PP - Number 5	0.1186	0.1222	0.1165	6	0.3047	0.3115	0.2968	6	0.2148	0.2236	0.2131	6
PLASTIC		47 PS - Number 6	3.0246	1.6878	1.6083	6	1.6110	1.2878	1.2271	6	1.8617	2.1039	2.0048	6
PLASTIC		48 Other - Number 7	0.0162	0.0417	0.0397	6	0.0619	0.0928	0.0884	6	0.0856	0.1543	0.1471	6
PLASTIC	49 Non-numbered containers	1.8013	0.7987	0.7611	6	1.8113	0.9034	0.8609	6	1.5868	0.2463	0.2347	6	
PLASTIC	Composite packaging	50	1.0889	1.3869	1.3216	6	0.8284	0.4624	0.4406	6	0.4652	0.3594	0.3424	6
PLASTIC	Plastic Bags/Film	51 LDPE - Number 4	0.2794	0.4328	0.4124	6	0.0106	0.0146	0.0139	6	0.0736	0.1616	0.1539	6
PLASTIC		52 LDPE - Number 4 - not suitable for recovery	4.7677	2.1981	2.0946	6	5.9086	1.7642	1.6811	6	4.5568	1.6978	1.6178	6
PLASTIC		53 LDPE - Number 4 - Other bags, film packaging, wrap	3.6984	1.5485	1.4756	6	5.2645	3.5769	3.4084	6	2.8064	1.8547	1.7673	6
PLASTIC		54 PP - Number 5 - Agriculture	0.0041	0.0106	0.0101	6	0.0000	0.0000	0.0000	6	0.0002	0.0004	0.0004	6
PLASTIC	Non-packaging End-of-Life Products	55 Crates, pails and tubs	1.2464	1.7415	1.6594	6	0.6465	1.0256	0.9772	6	0.4738	0.7591	0.7234	6
PLASTIC		56 Consumer goods	2.0763	2.2512	2.1452	6	2.2651	2.6280	2.5042	6	0.9711	0.9034	0.8608	6
PLASTIC		57 Non-program electronic products/components	0.1977	0.2700	0.2573	6	0.2494	0.5197	0.4952	6	0.0107	0.0274	0.0261	6
PLASTIC		58 Non-program paint products	0.1506	0.3871	0.3689	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
PLASTIC		59 Non-Municipal Hazardous and Special Waste	0.8233	1.4593	1.3905	6	0.6177	0.6175	0.5885	6	0.7015	1.5317	1.4596	6
DISP. CUPS	Fibre	60 Disposable cups - branded - hot	3.1704	4.7253	4.5027	6	4.0778	5.4597	5.2025	6	2.3121	2.9581	2.8188	6
DISP. CUPS		61 Disposable cups - branded - cold	0.3046	0.4054	0.3863	6	0.6435	0.7002	0.6672	6	0.1672	0.1855	0.1768	6
DISP. CUPS		62 Disposable cups - other	0.0344	0.0332	0.0316	6	0.0817	0.0910	0.0867	6	0.0108	0.0152	0.0145	6
DISP. CUPS	Plastic	63 Single use - branded	0.2960	0.7609	0.7250	6	0.0285	0.0591	0.0563	6	0.0805	0.0911	0.0868	6
DISP. CUPS		64 Single use - non-branded	0.0701	0.0553	0.0527	6	0.2247	0.3074	0.2930	6	0.2800	0.2874	0.2739	6
GLASS	Food and Consumer Goods Packaging	65 Clear - food containers	0.5623	1.0946	1.0431	6	0.1554	0.2733	0.2604	6	0.4400	0.5581	0.5318	6
GLASS		66 Coloured - food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS		67 Clear - non-food containers	0.0105	0.0271	0.0258	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS		68 Coloured - non-food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS	Automotive	69	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS	Other Products	70	0.4574	0.4344	0.4139	6	0.3501	0.5586	0.5323	6	0.3098	0.3928	0.3743	6
METAL	Food and Consumer Goods Packaging	71 Aluminum food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL		72 Aluminum - other	0.2316	0.1640	0.1563	6	0.2910	0.5272	0.5023	6	0.3665	0.1195	0.1139	6
METAL		73 Steel food containers	0.7224	0.7557	0.7201	6	0.7081	0.7912	0.7539	6	0.5030	0.2858	0.2724	6
METAL		74 Steel composite containers	0.0560	0.0659	0.0628	6	0.0359	0.0494	0.0470	6	0.0521	0.0579	0.0552	6
METAL		75 Steel - other	2.0161	1.6915	1.6118	6	0.8117	1.3328	1.2701	6	1.1721	1.6454	1.5679	6
METAL	Non-Paint Program	76 Aluminum	0.0093	0.0238	0.0227	6	0.0000	0.0000	0.0000	6	0.0214	0.0550	0.0525	6
METAL	Pressurized	77 Steel	0.1527	0.1577	0.1503	6	0.0906	0.1383	0.1318	6	0.0204	0.0525	0.0500	6

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MATERIAL CATEGORY			Kaizer Meadow				Otter Lake				Queens			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
METAL	Non-Electronics Program items	78 Appliances - small	0.2488	0.5867	0.5591	6	0.0000	0.0000	0.0000	6	1.0637	1.9140	1.8239	6
METAL		79 Appliances - large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL		80 Electronics - small	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL		81 Electronics - large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL	Other	82 Extension cords and wire of uncertain materials	0.0381	0.0980	0.0934	6	0.0276	0.0528	0.0503	6	0.3929	0.7500	0.7146	6
MHSW	Pressurized gas containers	83 Non-refillable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		84 Re-fillable	0.0389	0.1001	0.0954	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Marine flares	85 by symbol or container type	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Mercury containing products	86 by symbol or container type	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Batteries	87 Non-rechargeable	0.4670	0.6835	0.6513	6	0.0234	0.0551	0.0525	6	0.0579	0.1413	0.1346	6
MHSW		88 Rechargeable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		89 Lithium-ion	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Sharps and Pharmaceuticals	90 None	0.0000	0.0000	0.0000	6	0.0009	0.0024	0.0023	6	0.0000	0.0000	0.0000	6
MHSW	Pesticides and their containers	91 PCA regulated products	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		92 Non-PCA regulated products	0.0969	0.1722	0.1641	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Automotive fluid containers	93 HDPE - Number 2	0.2130	0.3984	0.3796	6	0.0000	0.0000	0.0000	6	0.1906	0.2600	0.2478	6
MHSW		94 PP - Number 5	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		95 Other	0.1497	0.1858	0.1770	6	0.0000	0.0000	0.0000	6	0.0114	0.0293	0.0279	6
MHSW	Other fluids, fuel, lubricants &	96 HDPE - Number 2	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		97 Other	0.0958	0.1678	0.1599	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Solvents and containers	98	0.0720	0.1850	0.1762	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Corrosives and containers	99	0.3217	0.7114	0.6779	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	(Crankshaft) oil filters	100	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Oily rags	101	0.0660	0.1697	0.1617	6	0.0000	0.0000	0.0000	6	0.0220	0.0565	0.0539	6
TEXTILES	Fabric	102 Clothing	4.2942	3.7502	3.5736	6	3.4631	3.7226	3.5472	6	4.1234	4.7529	4.5290	6
TEXTILES		103 Household use	0.7454	1.1839	1.1281	6	0.6906	1.1790	1.1235	6	0.8747	0.7763	0.7397	6
TEXTILES	Footwear	104	0.3575	0.4253	0.4053	6	1.4476	2.0100	1.9153	6	0.4123	0.7201	0.6862	6
TEXTILES	Other	105	1.5398	1.4686	1.3994	6	1.5677	2.5973	2.4749	6	1.7101	2.5457	2.4258	6
C&D	Wood	106 dimensional - clean	1.5390	2.7921	2.6606	6	0.7293	0.9771	0.9311	6	0.8503	1.3968	1.3310	6
C&D		107 dimensional - coated	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		108 engineered/composite - clean	0.4863	0.6321	0.6023	6	0.5187	0.7592	0.7235	6	0.2296	0.3309	0.3153	6
C&D		109 engineered/composite - coated	0.3090	0.7944	0.7570	6	0.7825	1.0562	1.0065	6	0.2067	0.5313	0.5063	6
C&D		110 pressure-treated	0.3377	0.8682	0.8273	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Wallboard and coverings	111 drywall - clean	5.1906	7.6161	7.2573	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		112 drywall - coated	0.0000	0.0000	0.0000	6	0.0204	0.0524	0.0499	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Kaizer Meadow				Otter Lake				Queens			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
C&D	Shingles	113 asphalt	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		114 other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Flooring	115 carpet	0.0479	0.1230	0.1172	6	0.0000	0.0000	0.0000	6	0.2607	0.6702	0.6386	6
C&D		116 other	0.0965	0.2481	0.2364	6	0.0000	0.0000	0.0000	6	0.2074	0.5332	0.5081	6
C&D	Insulation	117 fibreglass	1.0281	1.8142	1.7288	6	0.0000	0.0000	0.0000	6	0.1206	0.3100	0.2954	6
C&D		118 foam (PS)	0.0343	0.0882	0.0840	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		119 other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0853	0.2192	0.2088	6
C&D	Glass	120 window/door	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		121 decorative	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Countertops	122 laminate	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		123 slate/marble	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Ceiling Tile	124 None	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS	Furniture	125 mattresses - coil	0.0000	0.0000	0.0000	6	0.6008	1.5445	1.4717	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		126 mattresses - foam	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		127 mattresses - futon	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		128 box spring	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		129 upholstered - seating	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		130 solid wood	0.0000	0.0000	0.0000	6	0.2898	0.7449	0.7098	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		131 engineered/laminate wood	1.5685	4.0320	3.8420	6	0.0090	0.0231	0.0220	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		132 other (non-plastic)	1.4252	3.6635	3.4909	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
SP. CARE WASTE	Diapers	133	4.3701	5.9869	5.7049	6	7.3539	11.5165	10.9740	6	8.3711	9.4983	9.0509	6
SP. CARE WASTE	Other	134 Medical gloves, pharmaceuticals, cosmetics	0.4673	0.4347	0.4142	6	6.5116	10.5161	10.0207	6	4.5331	6.3336	6.0353	6
RED. CONTAINERS	Beverage	135 Sort 1 - Aluminum cans	0.4165	0.4552	0.4338	6	0.4645	0.5721	0.5452	6	0.4411	0.3197	0.3047	6
RED. CONTAINERS		136 Sort 2 - Glass - clear	0.2136	0.5054	0.4816	6	0.0000	0.0000	0.0000	6	0.1820	0.2810	0.2677	6
RED. CONTAINERS		137 Sort 3 - PET - clear	0.6405	0.5335	0.5084	6	0.7621	0.2762	0.2632	6	0.8434	0.5249	0.5001	6
RED. CONTAINERS		138 Sort 4 - Glass -coloured	0.0978	0.2515	0.2396	6	0.0416	0.1069	0.1019	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		139 Sort 5 - PET - green	0.2074	0.3764	0.3587	6	0.0536	0.0567	0.0541	6	0.1675	0.2466	0.2350	6
RED. CONTAINERS		140 Sort 6 - Other plastic (3, 5, 6 &7)	0.0000	0.0000	0.0000	6	0.0024	0.0063	0.0060	6	0.0154	0.0395	0.0377	6
RED. CONTAINERS		141 Sort 8 - Steel cans	0.0848	0.1788	0.1704	6	0.0000	0.0000	0.0000	6	0.0236	0.0607	0.0579	6
RED. CONTAINERS		142 Sort 9 - Gable top	0.0707	0.0877	0.0836	6	0.0548	0.1408	0.1341	6	0.0130	0.0333	0.0317	6
RED. CONTAINERS		143 Sort 10 - Tetra pak	0.0463	0.0549	0.0523	6	0.1691	0.1446	0.1378	6	0.1924	0.1567	0.1493	6
RED. CONTAINERS		144 Sort 11 - HDPE - translucent	0.0176	0.0452	0.0430	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		145 Sort 13 - PET - blue	0.0000	0.0000	0.0000	6	0.0425	0.0820	0.0782	6	0.0131	0.0250	0.0238	6
RED. CONTAINERS		146 Sort 21 - Glass - clear (over 500 ml)	0.1338	0.2374	0.2262	6	0.0000	0.0000	0.0000	6	0.0301	0.0775	0.0738	6
RED. CONTAINERS		147 Sort 22 - Glass - coloured (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		148 Sort 23 - Liquor PET - clear and coloured (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		149 Sort 24 - Liquor PET - clear and coloured	0.0000	0.0000	0.0000	6	0.2785	0.7160	0.6823	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		150 Sort 25 - Liquor - other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		151 Sort 26 - Liquor - other (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Kaizer Meadow				Otter Lake				Queens			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
REGULATED PAINT	Empty plastic	152	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0296	0.0761	0.0726	6
REGULATED PAINT	Empty metal	153	0.6258	1.1396	1.0859	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REGULATED PAINT	Empty aerosols	154	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REGULATED TIRES	Passenger and Light Truck	155	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REGULATED TIRES	Tractor Trailer	156	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES	Non-Tire Program items	157 Small	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES		158 Large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Computers	159 Desktop	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS		160 Portable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.2213	0.5688	0.5420	6
REG. ELECTRONICS	Computer Peripherals	161	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Desktop Printers	162	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Display Devices	163	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Personal/Portable A/V Systems	164	0.0929	0.2387	0.2275	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Vehicle A/V Systems	165	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Theatre in a Box	166	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Audio/Video Systems	167	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Non-cellular telephones	168	0.0410	0.1054	0.1004	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Cellular telephones	169	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			West Hants			
			Mean (%)	95% CI	Std. dev.	No. samples
FIBRE	Uncoated Paper - newsprint quality	1 Dailies	1.6088	1.4409	1.3730	6
FIBRE		2 Weeklies	0.0066	0.0126	0.0120	6
FIBRE		3 Magazines - uncoated	0.0000	0.0000	0.0000	6
FIBRE		4 Flyers/inserts - uncoated	0.8738	0.7731	0.7366	6
FIBRE		5 Telephone Books/Yellow Pages	0.0000	0.0000	0.0000	6
FIBRE	Coated Paper - catalogue quality	6 Magazines - glossy	0.6863	1.5986	1.5233	6
FIBRE		7 Catalogues/Calendars	0.0000	0.0000	0.0000	6
FIBRE		8 Flyers/inserts - glossy	1.0128	1.6884	1.6089	6
FIBRE	Books	9 Hard cover	0.0000	0.0000	0.0000	6
FIBRE		10 Soft cover	0.3260	0.8380	0.7986	6
FIBRE	Mixed Fines	11 None	3.5287	1.9134	1.8233	6
FIBRE	Other	12 Specialized purpose	0.5701	0.6604	0.6293	6
FIBRE	Packaging	13 Boxboard cardboard - single layer	3.0978	2.5004	2.3826	6
FIBRE		14 Corrugated cardboard - multi layer - dry	8.1661	9.2561	8.8201	6
FIBRE		15 Waxed corrugated cardboard - multi-layer	0.2981	0.7662	0.7301	6
FIBRE		16 Fast-food boxboard	0.1377	0.1408	0.1342	6
FIBRE		17 Fast-food wrap	0.2084	0.3946	0.3760	6
FIBRE		18 Molded Pulp	0.3398	0.2544	0.2424	6
FIBRE		19 Kraft paper bags/wrap	1.0069	1.3181	1.2560	6
FIBRE		20 Laminated paper bags/boxboard	1.2818	2.2761	2.1688	6
ORGANICS	Food Waste	21 Home/ICI food waste not in containers (see 24)	14.6342	12.9343	12.3250	6
ORGANICS	Tissue	22 Facial tissue and gift wrapping paper tissue	5.1045	2.8033	2.6713	6
ORGANICS	Yard Waste	23 Home/ICI gardening, brush, leaves	1.5009	1.6224	1.5459	6
ORGANICS	Other	24 Food in containers, including weight of containers	5.2840	6.1626	5.8723	6
ORGANICS	Fibre	25 Wet paper and cardboard	1.2860	2.6824	2.5561	6
DAIRY	Beverage - Dairy milk only	26 Polycoat (gable top) - 1 litre and greater	0.0133	0.0253	0.0241	6
DAIRY		27 Polycoat (gable top) - less than 1 litre	0.0671	0.1301	0.1239	6
DAIRY		28 Plastic jug (HDPE - Number 2) - 1 litre and greater	0.0000	0.0000	0.0000	6
DAIRY		29 Plastic jug (HDPE - Number 2) - less than 1 litre	0.0704	0.1364	0.1300	6
DAIRY		30 Tetra pak	0.0000	0.0000	0.0000	6
DAIRY		31 Plastic bag (LDPE film - Number 4)	0.0000	0.0000	0.0000	6
DAIRY	Ice Cream	32 Plastic container (HDPE - Number 2)	0.0000	0.0000	0.0000	6
DAIRY		33 Boxboard container (with lining)	0.0000	0.0000	0.0000	6
DAIRY	Other Dairy	34 Plastic container (HDPE - #2, PP - #5, PS - #6)	0.0000	0.0000	0.0000	6
DAIRY		35 Plastic container (other than 2, 5 and 6)	0.0000	0.0000	0.0000	6
DAIRY		36 Tetra pak	0.0000	0.0000	0.0000	6
DAIRY	Non-fluid Milk Product	37 Plastic film	0.0000	0.0000	0.0000	6
NON-DAIRY	Beverage - Non-Dairy	38 Polycoat (gable top)	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			West Hants			
			Mean (%)	95% CI	Std. dev.	No. samples
NON-DAIRY	alternatives	39 Plastic container	0.0000	0.0000	0.0000	6
NON-DAIRY		40 Tetra pak	0.0000	0.0000	0.0000	6
NON-DAIRY	Foodstuffs	41 Tetra pak	0.0000	0.0000	0.0000	6
PLASTIC	Food and other container packaging	42 PET - Number 1	0.6861	0.5077	0.4837	6
PLASTIC		43 HDPE - Number 2	0.5895	0.5286	0.5037	6
PLASTIC		44 PVC - Number 3	0.0805	0.1672	0.1593	6
PLASTIC		45 LDPE - Number 4	0.0000	0.0000	0.0000	6
PLASTIC		46 PP - Number 5	0.5136	0.6296	0.6000	6
PLASTIC		47 PS - Number 6	1.8802	1.3405	1.2774	6
PLASTIC		48 Other - Number 7	0.0125	0.0208	0.0199	6
PLASTIC		49 Non-numbered containers	1.0610	0.5806	0.5533	6
PLASTIC	Composite packaging	50	0.4931	0.4073	0.3881	6
PLASTIC	Plastic Bags/Film	51 LDPE - Number 4	0.2237	0.5067	0.4829	6
PLASTIC		52 LDPE - Number 4 - not suitable for recovery	5.4854	1.9854	1.8919	6
PLASTIC		53 LDPE - Number 4 - Other bags, film packaging, wrap	5.8891	2.8137	2.6812	6
PLASTIC		54 PP - Number 5 - Agriculture	0.0000	0.0000	0.0000	6
PLASTIC	Non-packaging End-of-Life Products	55 Crates, pails and tubs	2.0941	1.6089	1.5331	6
PLASTIC		56 Consumer goods	0.7729	0.5925	0.5646	6
PLASTIC		57 Non-program electronic products/components	0.3651	0.9384	0.8942	6
PLASTIC		58 Non-program paint products	0.1136	0.2921	0.2783	6
PLASTIC		59 Non-Municipal Hazardous and Special Waste	0.0373	0.0960	0.0915	6
DISP. CUPS	Fibre	60 Disposable cups - branded - hot	1.1193	0.9756	0.9296	6
DISP. CUPS		61 Disposable cups - branded - cold	0.1912	0.1714	0.1634	6
DISP. CUPS		62 Disposable cups - other	0.0116	0.0299	0.0285	6
DISP. CUPS	Plastic	63 Single use - branded	0.0265	0.0505	0.0481	6
DISP. CUPS		64 Single use - non-branded	0.0066	0.0126	0.0120	6
GLASS	Food and Consumer Goods Packaging	65 Clear - food containers	0.0307	0.0789	0.0752	6
GLASS		66 Coloured - food containers	0.0000	0.0000	0.0000	6
GLASS		67 Clear - non-food containers	0.0000	0.0000	0.0000	6
GLASS		68 Coloured - non-food containers	0.0000	0.0000	0.0000	6
GLASS	Automotive	69	0.0000	0.0000	0.0000	6
GLASS	Other Products	70	0.1420	0.2605	0.2482	6
METAL	Food and Consumer Goods Packaging	71 Aluminum food containers	0.0000	0.0000	0.0000	6
METAL		72 Aluminum - other	0.6471	0.4911	0.4680	6
METAL		73 Steel food containers	0.4559	0.6153	0.5863	6
METAL		74 Steel composite containers	0.0000	0.0000	0.0000	6
METAL		75 Steel - other	0.4697	0.4985	0.4751	6
METAL	Non-Paint Program	76 Aluminum	0.0000	0.0000	0.0000	6
METAL	Pressurized	77 Steel	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			West Hants			
			Mean (%)	95% CI	Std. dev.	No. samples
METAL	Non-Electronics Program items	78 Appliances - small	2.1446	2.3996	2.2866	6
METAL		79 Appliances - large	0.0000	0.0000	0.0000	6
METAL		80 Electronics - small	0.0000	0.0000	0.0000	6
METAL		81 Electronics - large	0.0000	0.0000	0.0000	6
METAL	Other	82 Extension cords and wire of uncertain materials	0.0389	0.0755	0.0720	6
MHSW	Pressurized gas containers	83 Non-refillable	0.0000	0.0000	0.0000	6
MHSW		84 Re-fillable	0.0000	0.0000	0.0000	6
MHSW	Marine flares	85 by symbol or container type	0.0000	0.0000	0.0000	6
MHSW	Mercury containing products	86 by symbol or container type	0.0000	0.0000	0.0000	6
MHSW	Batteries	87 Non-rechargeable	0.0000	0.0000	0.0000	6
MHSW		88 Rechargeable	0.0000	0.0000	0.0000	6
MHSW		89 Lithium-ion	0.0000	0.0000	0.0000	6
MHSW	Sharps and Pharmaceuticals	90 None	0.0000	0.0000	0.0000	6
MHSW	Pesticides and their containers	91 PCA regulated products	0.0000	0.0000	0.0000	6
MHSW		92 Non-PCA regulated products	0.0000	0.0000	0.0000	6
MHSW	Automotive fluid containers	93 HDPE - Number 2	0.4022	0.3931	0.3745	6
MHSW		94 PP - Number 5	0.0000	0.0000	0.0000	6
MHSW		95 Other	0.0000	0.0000	0.0000	6
MHSW	Other fluids, fuel, lubricants &	96 HDPE - Number 2	0.0000	0.0000	0.0000	6
MHSW		97 Other	0.0564	0.1450	0.1382	6
MHSW	Solvents and containers	98	0.0000	0.0000	0.0000	6
MHSW	Corrosives and containers	99	0.6447	1.6573	1.5792	6
MHSW	(Crankshaft) oil filters	100	0.0000	0.0000	0.0000	6
MHSW	Oily rags	101	0.0000	0.0000	0.0000	6
TEXTILES	Fabric	102 Clothing	5.0877	3.8856	3.7026	6
TEXTILES		103 Household use	0.7907	1.3880	1.3226	6
TEXTILES	Footwear	104	0.3289	0.5374	0.5121	6
TEXTILES	Other	105	0.2169	0.2907	0.2770	6
C&D	Wood	106 dimensional - clean	0.2259	0.4441	0.4232	6
C&D		107 dimensional - coated	0.0000	0.0000	0.0000	6
C&D		108 engineered/composite - clean	0.0695	0.1786	0.1702	6
C&D		109 engineered/composite - coated	0.0782	0.1479	0.1410	6
C&D		110 pressure-treated	1.4745	2.8901	2.7540	6
C&D	Wallboard and coverings	111 drywall - clean	0.0000	0.0000	0.0000	6
C&D		112 drywall - coated	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			West Hants			
			Mean (%)	95% CI	Std. dev.	No. samples
C&D	Shingles	113 asphalt	0.3794	0.7925	0.7551	6
C&D		114 other	0.0000	0.0000	0.0000	6
C&D	Flooring	115 carpet	1.3072	3.3602	3.2019	6
C&D		116 other	0.4432	1.1394	1.0857	6
C&D	Insulation	117 fibreglass	0.0653	0.1678	0.1599	6
C&D		118 foam (PS)	0.3665	0.9421	0.8978	6
C&D		119 other	0.0000	0.0000	0.0000	6
C&D	Glass	120 window/door	0.0000	0.0000	0.0000	6
C&D		121 decorative	0.0000	0.0000	0.0000	6
C&D	Countertops	122 laminate	0.0000	0.0000	0.0000	6
C&D		123 slate/marble	0.0000	0.0000	0.0000	6
C&D	Ceiling Tile	124 None	0.0000	0.0000	0.0000	6
BULKY ITEMS	Furniture	125 mattresses - coil	0.0000	0.0000	0.0000	6
BULKY ITEMS		126 mattresses - foam	0.0000	0.0000	0.0000	6
BULKY ITEMS		127 mattresses - futon	0.0000	0.0000	0.0000	6
BULKY ITEMS		128 box spring	0.0000	0.0000	0.0000	6
BULKY ITEMS		129 upholstered - seating	0.4674	1.2015	1.1449	6
BULKY ITEMS		130 solid wood	0.0515	0.1324	0.1261	6
BULKY ITEMS		131 engineered/laminate wood	0.5393	1.0138	0.9660	6
BULKY ITEMS		132 other (non-plastic)	1.7085	4.3918	4.1849	6
SP. CARE WASTE	Diapers	133	2.2480	2.8651	2.7301	6
SP. CARE WASTE	Other	134 Medical gloves, pharmaceuticals, cosmetics	2.9031	3.9268	3.7418	6
RED. CONTAINERS	Beverage	135 Sort 1 - Aluminum cans	0.3971	0.4391	0.4184	6
RED. CONTAINERS		136 Sort 2 - Glass - clear	0.0000	0.0000	0.0000	6
RED. CONTAINERS		137 Sort 3 - PET - clear	0.4089	0.4608	0.4391	6
RED. CONTAINERS		138 Sort 4 - Glass -coloured	0.0000	0.0000	0.0000	6
RED. CONTAINERS		139 Sort 5 - PET - green	0.0266	0.0432	0.0412	6
RED. CONTAINERS		140 Sort 6 - Other plastic (3, 5, 6 &7)	0.0000	0.0000	0.0000	6
RED. CONTAINERS		141 Sort 8 - Steel cans	0.0000	0.0000	0.0000	6
RED. CONTAINERS		142 Sort 9 - Gable top	0.0000	0.0000	0.0000	6
RED. CONTAINERS		143 Sort 10 - Tetra pak	0.1077	0.1149	0.1095	6
RED. CONTAINERS		144 Sort 11 - HDPE - translucent	0.0000	0.0000	0.0000	6
RED. CONTAINERS		145 Sort 13 - PET - blue	0.0042	0.0107	0.0102	6
RED. CONTAINERS		146 Sort 21 - Glass - clear (over 500 ml)	0.0000	0.0000	0.0000	6
RED. CONTAINERS		147 Sort 22 - Glass - coloured (over 500 ml)	0.0662	0.1703	0.1623	6
RED. CONTAINERS		148 Sort 23 - Liquor PET - clear and coloured (over 500 ml)	0.0000	0.0000	0.0000	6
RED. CONTAINERS		149 Sort 24 - Liquor PET - clear and coloured	0.1704	0.4381	0.4175	6
RED. CONTAINERS	150 Sort 25 - Liquor - other	0.0000	0.0000	0.0000	6	
RED. CONTAINERS	151 Sort 26 - Liquor - other (over 500 ml)	0.0000	0.0000	0.0000	6	

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MATERIAL CATEGORY			West Hants			
			Mean (%)	95% CI	Std. dev.	No. samples
REGULATED PAINT	Empty plastic	152	0.0000	0.0000	0.0000	6
REGULATED PAINT	Empty metal	153	0.1707	0.3314	0.3158	6
REGULATED PAINT	Empty aerosols	154	0.0000	0.0000	0.0000	6
REGULATED TIRES	Passenger and Light Truck	155	2.1014	5.4019	5.1474	6
REGULATED TIRES	Tractor Trailer	156	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES	Non-Tire Program items	157 Small	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES		158 Large	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Computers	159 Desktop	0.0000	0.0000	0.0000	6
REG. ELECTRONICS		160 Portable	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Computer Peripherals	161	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Desktop Printers	162	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Display Devices	163	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Personal/Portable A/V Systems	164	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Vehicle A/V Systems	165	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Theatre in a Box	166	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Audio/Video Systems	167	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Non-cellular telephones	168	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Cellular telephones	169	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Colchester				Cumberland				Guysborough			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
FIBRE	Uncoated Paper - newsprint quality	1 Dailies	1.1290	0.9131	0.8701	6	1.4437	1.8747	1.7864	6	0.8435	0.7663	0.7302	6
FIBRE		2 Weeklies	0.0000	0.0000	0.0000	6	0.0219	0.0429	0.0409	6	0.1074	0.1713	0.1632	6
FIBRE		3 Magazines - uncoated	0.1728	0.3039	0.2895	6	0.0000	0.0000	0.0000	6	0.0545	0.0958	0.0913	6
FIBRE		4 Flyers/inserts - uncoated	0.4304	0.2362	0.2251	6	0.6490	0.7883	0.7512	6	0.7949	0.5224	0.4978	6
FIBRE		5 Telephone Books/Yellow Pages	0.0362	0.0931	0.0887	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
FIBRE	Coated Paper - catalogue quality	6 Magazines - glossy	0.2850	0.6362	0.6062	6	0.1193	0.1781	0.1697	6	0.2639	0.3066	0.2922	6
FIBRE		7 Catalogues/Calendars	0.1295	0.1360	0.1296	6	0.1813	0.3668	0.3495	6	0.1838	0.3598	0.3429	6
FIBRE		8 Flyers/inserts - glossy	0.2606	0.2488	0.2370	6	0.0872	0.1315	0.1253	6	0.4440	0.5482	0.5224	6
FIBRE	Books	9 Hard cover	0.1982	0.5094	0.4854	6	0.0000	0.0000	0.0000	6	0.0870	0.1497	0.1426	6
FIBRE		10 Soft cover	0.4580	0.8979	0.8556	6	0.4717	1.2125	1.1554	6	0.2948	0.3939	0.3754	6
FIBRE	Mixed Fines	11 None	2.8676	1.3421	1.2789	6	1.9852	1.7145	1.6337	6	3.5627	1.5240	1.4522	6
FIBRE	Other	12 Specialized purpose	0.0024	0.0062	0.0059	6	0.3705	0.4407	0.4199	6	0.0171	0.0302	0.0288	6
FIBRE	Packaging	13 Boxboard cardboard - single layer	3.8174	1.6552	1.5772	6	2.2384	0.6543	0.6235	6	3.4836	2.2404	2.1349	6
FIBRE		14 Corrugated cardboard - multi layer - dry	0.5961	0.6043	0.5758	6	1.6255	1.7472	1.6649	6	0.9182	0.5679	0.5411	6
FIBRE		15 Waxed corrugated cardboard - multi-layer	0.0000	0.0000	0.0000	6	0.0049	0.0126	0.0120	6	0.0000	0.0000	0.0000	6
FIBRE		16 Fast-food boxboard	0.1364	0.0991	0.0944	6	0.1509	0.1650	0.1573	6	0.0958	0.1591	0.1516	6
FIBRE		17 Fast-food wrap	0.0568	0.0746	0.0711	6	0.0387	0.0432	0.0411	6	0.0231	0.0359	0.0342	6
FIBRE		18 Molded Pulp	0.1314	0.1703	0.1622	6	0.2394	0.2773	0.2643	6	0.5555	0.8607	0.8202	6
FIBRE		19 Kraft paper bags/wrap	0.8899	0.5860	0.5584	6	0.9792	0.4152	0.3956	6	1.7396	1.8277	1.7416	6
FIBRE		20 Laminated paper bags/boxboard	0.2001	0.2450	0.2335	6	0.2563	0.4237	0.4037	6	0.1785	0.1952	0.1860	6
ORGANICS	Food Waste	21 Home/ICI food waste not in containers (see 24)	16.9522	3.9496	3.7636	6	22.3080	3.0772	2.9322	6	26.9967	10.7618	10.2548	6
ORGANICS	Tissue	22 Facial tissue and gift wrapping paper tissue	6.5941	1.0584	1.0086	6	5.9705	1.1071	1.0549	6	4.0403	1.7332	1.6515	6
ORGANICS	Yard Waste	23 Home/ICI gardening, brush, leaves	1.6402	2.2955	2.1874	6	3.1851	5.2112	4.9657	6	0.0741	0.1904	0.1814	6
ORGANICS	Other	24 Food in containers, including weight of containers	5.3283	6.7209	6.4043	6	6.4204	7.1170	6.7818	6	5.4382	6.7114	6.3952	6
ORGANICS	Fibre	25 Wet paper and cardboard	2.7161	4.3300	4.1260	6	0.1836	0.3180	0.3030	6	2.2255	4.0093	3.8204	6
DAIRY	Beverage - Dairy milk only	26 Polycoat (gable top) - 1 litre and greater	0.2188	0.2525	0.2406	6	0.3611	0.5109	0.4868	6	0.3232	0.4541	0.4327	6
DAIRY		27 Polycoat (gable top) - less than 1 litre	0.0691	0.0833	0.0794	6	0.0483	0.0606	0.0577	6	0.0568	0.0660	0.0629	6
DAIRY		28 Plastic jug (HDPE - Number 2) - 1 litre and greater	0.0262	0.0673	0.0642	6	0.0726	0.0894	0.0852	6	0.0473	0.0871	0.0830	6
DAIRY		29 Plastic jug (HDPE - Number 2) - less than 1 litre	0.0330	0.0543	0.0518	6	0.0170	0.0436	0.0416	6	0.0169	0.0291	0.0277	6
DAIRY		30 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		31 Plastic bag (LDPE film - Number 4)	0.0000	0.0000	0.0000	6	0.0049	0.0126	0.0120	6	0.0000	0.0000	0.0000	6
DAIRY	Ice Cream	32 Plastic container (HDPE - Number 2)	0.0300	0.0771	0.0735	6	0.1173	0.2145	0.2044	6	0.0000	0.0000	0.0000	6
DAIRY		33 Boxboard container (with lining)	0.0000	0.0000	0.0000	6	0.0269	0.0692	0.0659	6	0.0084	0.0216	0.0206	6
DAIRY	Other Dairy	34 Plastic container (HDPE - #2, PP - #5, PS - #6)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		35 Plastic container (other than 2, 5 and 6)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		36 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY	Non-fluid Milk Product	37 Plastic film	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY	Beverage - Non-Dairy	38 Polycoat (gable top)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Colchester				Cumberland				Guysborough			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
NON-DAIRY	alternatives	39 Plastic container	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY		40 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY	Foodstuffs	41 Tetra pak	0.0000	0.0000	0.0000	6	0.0450	0.1156	0.1101	6	0.0232	0.0596	0.0568	6
PLASTIC	Food and other container packaging	42 PET - Number 1	0.9270	0.3282	0.3127	6	0.6693	0.1564	0.1490	6	0.4116	0.1342	0.1279	6
PLASTIC		43 HDPE - Number 2	0.9612	0.3931	0.3746	6	0.6639	0.3238	0.3085	6	0.7013	0.2848	0.2714	6
PLASTIC		44 PVC - Number 3	0.0168	0.0432	0.0411	6	0.0620	0.0444	0.0423	6	0.2106	0.4972	0.4738	6
PLASTIC		45 LDPE - Number 4	0.0000	0.0000	0.0000	6	0.0183	0.0472	0.0449	6	0.0000	0.0000	0.0000	6
PLASTIC		46 PP - Number 5	0.3126	0.2117	0.2017	6	0.2653	0.1679	0.1600	6	0.1660	0.1071	0.1020	6
PLASTIC		47 PS - Number 6	1.6806	0.9575	0.9124	6	1.4792	0.9705	0.9248	6	1.7582	1.7262	1.6449	6
PLASTIC		48 Other - Number 7	0.0128	0.0217	0.0207	6	0.0731	0.1397	0.1331	6	0.0145	0.0145	0.0138	6
PLASTIC		49 Non-numbered containers	2.1274	0.9987	0.9517	6	1.2718	0.7801	0.7433	6	1.5707	1.5284	1.4564	6
PLASTIC	Composite packaging	50	0.9182	0.2802	0.2670	6	1.0184	0.1784	0.1700	6	0.3611	0.2375	0.2263	6
PLASTIC	Plastic Bags/Film	51 LDPE - Number 4	0.0559	0.0808	0.0770	6	0.2107	0.5183	0.4939	6	0.1291	0.1333	0.1270	6
PLASTIC		52 LDPE - Number 4 - not suitable for recovery	5.5605	3.4522	3.2896	6	3.7682	0.9446	0.9001	6	4.5827	1.8825	1.7938	6
PLASTIC		53 LDPE - Number 4 - Other bags, film packaging, wrap	3.9003	1.7946	1.7100	6	3.6688	1.3700	1.3055	6	3.6317	2.6916	2.5649	6
PLASTIC		54 PP - Number 5 - Agriculture	0.1116	0.2869	0.2734	6	0.0196	0.0503	0.0479	6	0.5007	1.2871	1.2265	6
PLASTIC	Non-packaging End-of-Life Products	55 Crates, pails and tubs	0.1479	0.2721	0.2592	6	0.5733	0.8070	0.7689	6	1.0223	1.1340	1.0806	6
PLASTIC		56 Consumer goods	1.8580	0.8773	0.8360	6	5.2042	5.8728	5.5962	6	3.2217	2.3204	2.2111	6
PLASTIC		57 Non-program electronic products/components	0.1458	0.3747	0.3571	6	0.1860	0.4781	0.4556	6	0.0217	0.0558	0.0531	6
PLASTIC		58 Non-program paint products	0.0000	0.0000	0.0000	6	0.0135	0.0346	0.0330	6	0.0000	0.0000	0.0000	6
PLASTIC		59 Non-Municipal Hazardous and Special Waste	0.9580	0.9718	0.9260	6	0.1897	0.3819	0.3639	6	0.5241	0.7988	0.7611	6
DISP. CUPS	Fibre	60 Disposable cups - branded - hot	0.9665	0.4237	0.4037	6	1.4370	0.8071	0.7691	6	0.7370	0.5076	0.4837	6
DISP. CUPS		61 Disposable cups - branded - cold	0.2299	0.1291	0.1231	6	0.2616	0.3512	0.3346	6	0.2814	0.4946	0.4713	6
DISP. CUPS		62 Disposable cups - other	0.0072	0.0127	0.0121	6	0.0262	0.0426	0.0406	6	0.0193	0.0368	0.0350	6
DISP. CUPS	Plastic	63 Single use - branded	0.0192	0.0494	0.0470	6	0.0167	0.0237	0.0226	6	0.0072	0.0127	0.0121	6
DISP. CUPS		64 Single use - non-branded	0.0612	0.0814	0.0775	6	0.0264	0.0195	0.0186	6	0.0785	0.1081	0.1030	6
GLASS	Food and Consumer Goods Packaging	65 Clear - food containers	0.4246	0.5925	0.5646	6	0.7070	0.8865	0.8447	6	0.0000	0.0000	0.0000	6
GLASS		66 Coloured - food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS		67 Clear - non-food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS		68 Coloured - non-food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS	Automotive	69	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS	Other Products	70	0.9982	1.4624	1.3935	6	3.1679	2.2418	2.1362	6	1.4110	1.1412	1.0875	6
METAL	Food and Consumer Goods Packaging	71 Aluminum food containers	0.0080	0.0146	0.0139	6	0.0171	0.0440	0.0419	6	0.0000	0.0000	0.0000	6
METAL		72 Aluminum - other	0.5670	0.3187	0.3036	6	0.2114	0.1563	0.1490	6	0.2725	0.1972	0.1879	6
METAL		73 Steel food containers	0.5341	0.3960	0.3773	6	0.7473	0.6264	0.5969	6	0.6246	0.4160	0.3964	6
METAL		74 Steel composite containers	0.1163	0.1582	0.1507	6	0.3969	0.6081	0.5794	6	0.1011	0.1732	0.1650	6
METAL		75 Steel - other	1.6686	1.1915	1.1354	6	3.5925	4.2021	4.0042	6	2.6602	2.0737	1.9761	6
METAL	Non-Paint Program Pressurized	76 Aluminum	0.0072	0.0185	0.0176	6	0.0037	0.0094	0.0090	6	0.0000	0.0000	0.0000	6
METAL		77 Steel	0.0252	0.0648	0.0617	6	0.0485	0.0841	0.0801	6	0.0912	0.1193	0.1137	6

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MATERIAL CATEGORY			Colchester				Cumberland				Guysborough			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
METAL	Non-Electronics Program items	78 Appliances - small	0.3792	0.9747	0.9288	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL		79 Appliances - large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL		80 Electronics - small	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL		81 Electronics - large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL	Other	82 Extension cords and wire of uncertain materials	0.3996	1.0271	0.9787	6	0.0000	0.0000	0.0000	6	0.5285	0.7143	0.6807	6
MHSW	Pressurized gas containers	83 Non-refillable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		84 Re-fillable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Marine flares	85 by symbol or container type	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Mercury containing products	86 by symbol or container type	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Batteries	87 Non-rechargeable	0.2513	0.4300	0.4098	6	0.1600	0.1880	0.1792	6	0.0911	0.1022	0.0974	6
MHSW		88 Rechargeable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		89 Lithium-ion	0.0000	0.0000	0.0000	6	0.0196	0.0503	0.0479	6	0.0000	0.0000	0.0000	6
MHSW	Sharps and Pharmaceuticals	90 None	0.0263	0.0643	0.0612	6	0.0000	0.0000	0.0000	6	0.1351	0.2965	0.2825	6
MHSW	Pesticides and their containers	91 PCA regulated products	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		92 Non-PCA regulated products	0.0000	0.0000	0.0000	6	0.0049	0.0126	0.0120	6	0.0000	0.0000	0.0000	6
MHSW	Automotive fluid containers	93 HDPE - Number 2	0.1083	0.1907	0.1817	6	0.0579	0.0685	0.0653	6	0.3236	0.4992	0.4757	6
MHSW		94 PP - Number 5	0.0000	0.0000	0.0000	6	0.3736	0.9603	0.9150	6	0.0000	0.0000	0.0000	6
MHSW		95 Other	0.1390	0.3573	0.3405	6	0.2080	0.5161	0.4918	6	0.0000	0.0000	0.0000	6
MHSW	Other fluids, fuel, lubricants &	96 HDPE - Number 2	0.0251	0.0513	0.0489	6	0.0931	0.1941	0.1849	6	0.0000	0.0000	0.0000	6
MHSW		97 Other	0.0000	0.0000	0.0000	6	0.3320	0.5775	0.5503	6	0.4641	1.1930	1.1368	6
MHSW	Solvents and containers	98	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Corrosives and	99	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	(Crankshaft) oil filters	100	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Oily rags	101	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.1508	0.3063	0.2918	6
TEXTILES	Fabric	102 Clothing	9.7592	5.2384	4.9916	6	4.2201	2.3083	2.1996	6	7.4090	4.6864	4.4656	6
TEXTILES		103 Household use	0.2650	0.5992	0.5710	6	2.9138	4.7704	4.5457	6	1.5795	0.9803	0.9341	6
TEXTILES	Footwear	104	1.5009	1.2592	1.1999	6	1.0074	0.6821	0.6500	6	0.7356	1.2101	1.1531	6
TEXTILES	Other	105	1.6673	1.2893	1.2285	6	2.2516	1.1630	1.1082	6	1.2757	1.2846	1.2241	6
C&D	Wood	106 dimensional - clean	0.1092	0.1646	0.1568	6	0.1941	0.3743	0.3567	6	1.6625	3.1857	3.0356	6
C&D		107 dimensional - coated	0.3787	0.4417	0.4209	6	0.0232	0.0597	0.0569	6	0.0606	0.1225	0.1167	6
C&D		108 engineered/composite - clean	0.2616	0.4207	0.4009	6	0.3684	0.3375	0.3216	6	0.0510	0.1311	0.1249	6
C&D		109 engineered/composite - coated	0.0552	0.1419	0.1352	6	0.0385	0.0755	0.0720	6	0.4123	0.7986	0.7610	6
C&D		110 pressure-treated	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Wallboard and coverings	111 drywall - clean	0.5381	0.6833	0.6511	6	0.0000	0.0000	0.0000	6	0.5012	1.0422	0.9931	6
C&D		112 drywall - coated	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Colchester				Cumberland				Guysborough			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
C&D	Shingles	113 asphalt	0.0000	0.0000	0.0000	6	0.4274	0.7096	0.6762	6	0.0820	0.2107	0.2007	6
C&D		114 other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0501	0.1287	0.1227	6
C&D	Flooring	115 carpet	0.0000	0.0000	0.0000	6	0.1471	0.3782	0.3603	6	0.3664	0.9418	0.8974	6
C&D		116 other	0.0000	0.0000	0.0000	6	0.1681	0.4321	0.4118	6	0.1864	0.4793	0.4567	6
C&D	Insulation	117 fibreglass	0.0000	0.0000	0.0000	6	0.0608	0.1563	0.1489	6	0.8366	1.8373	1.7507	6
C&D		118 foam (PS)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		119 other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Glass	120 window/door	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		121 decorative	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Countertops	122 laminate	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		123 slate/marble	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Ceiling Tile	124 None	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS	Furniture	125 mattresses - coil	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		126 mattresses - foam	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		127 mattresses - futon	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		128 box spring	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		129 upholstered - seating	0.0000	0.0000	0.0000	6	2.1102	5.4245	5.1689	6	0.5652	1.0101	0.9625	6
BULKY ITEMS		130 solid wood	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		131 engineered/laminate wood	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		132 other (non-plastic)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
SP. CARE WASTE	Diapers	133	10.4791	4.3849	4.1783	6	3.5525	4.2065	4.0083	6	1.3631	1.6303	1.5535	6
SP. CARE WASTE	Other	134 Medical gloves, pharmaceuticals, cosmetics	0.9963	0.7983	0.7607	6	0.3103	0.3858	0.3676	6	1.0751	1.1406	1.0868	6
RED. CONTAINERS	Beverage	135 Sort 1 - Aluminum cans	0.3966	0.5598	0.5334	6	0.2273	0.2162	0.2060	6	0.3171	0.2914	0.2777	6
RED. CONTAINERS		136 Sort 2 - Glass - clear	0.1947	0.2312	0.2203	6	0.0281	0.0723	0.0689	6	0.1248	0.1587	0.1513	6
RED. CONTAINERS		137 Sort 3 - PET - clear	0.4137	0.4154	0.3958	6	0.3932	0.3719	0.3543	6	0.6701	0.4699	0.4478	6
RED. CONTAINERS		138 Sort 4 - Glass - coloured	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		139 Sort 5 - PET - green	0.0780	0.1092	0.1041	6	0.0503	0.0483	0.0461	6	0.0677	0.0605	0.0577	6
RED. CONTAINERS		140 Sort 6 - Other plastic (3, 5, 6 &7)	0.0000	0.0000	0.0000	6	0.0171	0.0440	0.0419	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		141 Sort 8 - Steel cans	0.0000	0.0000	0.0000	6	0.0357	0.0620	0.0591	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		142 Sort 9 - Gable top	0.0103	0.0201	0.0191	6	0.0061	0.0157	0.0150	6	0.0218	0.0265	0.0252	6
RED. CONTAINERS		143 Sort 10 - Tetra pak	0.0979	0.1127	0.1074	6	0.1080	0.1444	0.1376	6	0.0715	0.0787	0.0750	6
RED. CONTAINERS		144 Sort 11 - HDPE - translucent	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		145 Sort 13 - PET - blue	0.0000	0.0000	0.0000	6	0.0051	0.0131	0.0125	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		146 Sort 21 - Glass - clear (over 500 ml)	0.2244	0.3952	0.3766	6	0.0000	0.0000	0.0000	6	0.0947	0.2435	0.2320	6
RED. CONTAINERS		147 Sort 22 - Glass - coloured (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		148 Sort 23 - Liquor PET - clear and coloured (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		149 Sort 24 - Liquor PET - clear and coloured	0.2861	0.6444	0.6141	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		150 Sort 25 - Liquor - other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		151 Sort 26 - Liquor - other (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Colchester				Cumberland				Guysborough			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
REGULATED PAINT	Empty plastic	152	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REGULATED PAINT	Empty metal	153	0.0000	0.0000	0.0000	6	0.2677	0.4140	0.3945	6	0.0313	0.0806	0.0768	6
REGULATED PAINT	Empty aerosols	154	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REGULATED TIRES	Passenger and Light Truck	155	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.1157	0.2975	0.2835	6
REGULATED TIRES	Tractor Trailer	156	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES	Non-Tire Program items	157 Small	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES		158 Large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Computers	159 Desktop	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS		160 Portable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Computer Peripherals	161	0.1799	0.4418	0.4210	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Desktop Printers	162	0.0000	0.0000	0.0000	6	0.1094	0.1917	0.1826	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Display Devices	163	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Personal/Portable A/V Systems	164	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0049	0.0125	0.0119	6
REG. ELECTRONICS	Vehicle A/V Systems	165	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Theatre in a Box	166	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Audio/Video Systems	167	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0097	0.0249	0.0238	6
REG. ELECTRONICS	Non-cellular telephones	168	0.0000	0.0000	0.0000	6	0.0703	0.1808	0.1723	6	0.5545	1.4254	1.3583	6
REG. ELECTRONICS	Cellular telephones	169	0.0458	0.0914	0.0871	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Kaizer Meadow				Otter Lake				Queens			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
FIBRE	Uncoated Paper - newsprint quality	1 Dailies	0.5041	0.5909	0.5631	6	0.4343	0.5064	0.4825	6	0.1112	0.1583	0.1508	6
FIBRE		2 Weeklies	0.0000	0.0000	0.0000	6	0.0394	0.0456	0.0434	6	0.0109	0.0280	0.0267	6
FIBRE		3 Magazines - uncoated	0.3606	0.9270	0.8833	6	0.0355	0.0602	0.0573	6	0.0000	0.0000	0.0000	6
FIBRE		4 Flyers/inserts - uncoated	0.5848	0.6017	0.5733	6	0.4715	0.4942	0.4709	6	0.8800	1.0794	1.0286	6
FIBRE		5 Telephone Books/Yellow Pages	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
FIBRE	Coated Paper - catalogue quality	6 Magazines - glossy	0.2926	0.7522	0.7167	6	0.2880	0.3273	0.3118	6	0.0989	0.1628	0.1551	6
FIBRE		7 Catalogues/Calendars	0.5894	0.9206	0.8772	6	0.2423	0.2697	0.2570	6	0.0454	0.0535	0.0510	6
FIBRE		8 Flyers/inserts - glossy	0.1729	0.1758	0.1675	6	0.1918	0.1456	0.1388	6	0.2449	0.1884	0.1795	6
FIBRE	Books	9 Hard cover	1.0129	2.5507	2.4306	6	0.0222	0.0571	0.0544	6	0.2551	0.6559	0.6250	6
FIBRE		10 Soft cover	0.4194	0.9860	0.9395	6	0.0185	0.0476	0.0453	6	0.0000	0.0000	0.0000	6
FIBRE	Mixed Fines	11 None	2.5330	1.5018	1.4310	6	2.4194	1.1391	1.0855	6	1.2739	0.8403	0.8007	6
FIBRE	Other	12 Specialized purpose	0.0193	0.0314	0.0299	6	0.0891	0.0870	0.0829	6	0.0676	0.0745	0.0709	6
FIBRE	Packaging	13 Boxboard cardboard - single layer	3.0276	2.0629	1.9657	6	2.5840	0.2022	0.1927	6	3.3938	2.8081	2.6758	6
FIBRE		14 Corrugated cardboard - multi layer - dry	1.0667	1.2386	1.1803	6	2.3166	2.0182	1.9231	6	1.5354	1.6923	1.6126	6
FIBRE		15 Waxed corrugated cardboard - multi-layer	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
FIBRE		16 Fast-food boxboard	0.0749	0.1209	0.1152	6	0.7489	1.7640	1.6809	6	0.0630	0.0744	0.0709	6
FIBRE		17 Fast-food wrap	0.0264	0.0230	0.0219	6	0.0350	0.0255	0.0243	6	0.3645	0.5709	0.5440	6
FIBRE		18 Molded Pulp	0.1906	0.2282	0.2175	6	0.2910	0.2406	0.2292	6	0.1071	0.1352	0.1288	6
FIBRE		19 Kraft paper bags/wrap	0.5788	0.3076	0.2931	6	0.4455	0.2258	0.2151	6	0.2975	0.2360	0.2249	6
FIBRE		20 Laminated paper bags/boxboard	0.0657	0.0825	0.0786	6	0.1484	0.1011	0.0964	6	0.1120	0.1225	0.1168	6
ORGANICS	Food Waste	21 Home/ICI food waste not in containers (see 24)	17.3126	5.0655	4.8269	6	14.5953	3.9430	3.7573	6	17.0982	7.2402	6.8991	6
ORGANICS	Tissue	22 Facial tissue and gift wrapping paper tissue	4.7197	2.0183	1.9232	6	5.2542	2.5360	2.4165	6	3.4710	0.9828	0.9365	6
ORGANICS	Yard Waste	23 Home/ICI gardening, brush, leaves	0.1838	0.4726	0.4503	6	4.1476	2.8427	2.7088	6	0.7722	0.9455	0.9009	6
ORGANICS	Other	24 Food in containers, including weight of containers	4.1419	4.8279	4.6005	6	9.0470	8.7625	8.3498	6	14.1772	6.2357	5.9420	6
ORGANICS	Fibre	25 Wet paper and cardboard	0.1303	0.2201	0.2097	6	1.5572	2.4672	2.3510	6	0.3382	0.6402	0.6100	6
DAIRY	Beverage - Dairy milk only	26 Polycoat (gable top) - 1 litre and greater	0.1240	0.2097	0.1998	6	0.1204	0.2012	0.1917	6	0.2813	0.3658	0.3486	6
DAIRY		27 Polycoat (gable top) - less than 1 litre	0.0639	0.1040	0.0991	6	0.0530	0.0498	0.0474	6	0.1544	0.1923	0.1832	6
DAIRY		28 Plastic jug (HDPE - Number 2) - 1 litre and greater	0.0000	0.0000	0.0000	6	0.0273	0.0365	0.0348	6	0.0036	0.0092	0.0087	6
DAIRY		29 Plastic jug (HDPE - Number 2) - less than 1 litre	0.0158	0.0407	0.0388	6	0.0205	0.0234	0.0223	6	0.0591	0.0757	0.0721	6
DAIRY		30 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		31 Plastic bag (LDPE film - Number 4)	0.0036	0.0094	0.0089	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY	Ice Cream	32 Plastic container (HDPE - Number 2)	0.0167	0.0430	0.0410	6	0.5216	1.0440	0.9948	6	0.1086	0.1482	0.1412	6
DAIRY		33 Boxboard container (with lining)	0.0425	0.0694	0.0661	6	0.0277	0.0520	0.0496	6	0.0024	0.0061	0.0058	6
DAIRY	Other Dairy	34 Plastic container (HDPE - #2, PP - #5, PS - #6)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0179	0.0460	0.0438	6
DAIRY		35 Plastic container (other than 2, 5 and 6)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY		36 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
DAIRY	Non-fluid Milk Product	37 Plastic film	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY	Beverage - Non-Dairy	38 Polycoat (gable top)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Kaizer Meadow				Otter Lake				Queens			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
NON-DAIRY	alternatives	39 Plastic container	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY		40 Tetra pak	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
NON-DAIRY	Foodstuffs	41 Tetra pak	0.0074	0.0191	0.0182	6	0.0205	0.0286	0.0272	6	0.0000	0.0000	0.0000	6
PLASTIC	Food and other container packaging	42 PET - Number 1	0.5798	0.3621	0.3450	6	0.8235	0.3391	0.3231	6	0.5387	0.3672	0.3499	6
PLASTIC		43 HDPE - Number 2	0.6136	0.6171	0.5880	6	0.8045	0.5627	0.5362	6	0.8798	0.6488	0.6182	6
PLASTIC		44 PVC - Number 3	0.1239	0.2224	0.2119	6	0.1165	0.1181	0.1125	6	0.1207	0.1530	0.1458	6
PLASTIC		45 LDPE - Number 4	0.0000	0.0000	0.0000	6	0.0466	0.0615	0.0586	6	0.0186	0.0354	0.0338	6
PLASTIC		46 PP - Number 5	0.1939	0.2119	0.2019	6	0.5249	0.2879	0.2743	6	0.1299	0.1330	0.1267	6
PLASTIC		47 PS - Number 6	1.2469	1.0478	0.9984	6	2.4162	0.8834	0.8417	6	2.2794	1.2838	1.2233	6
PLASTIC		48 Other - Number 7	0.1515	0.2884	0.2748	6	0.0191	0.0492	0.0469	6	0.0557	0.1431	0.1364	6
PLASTIC		49 Non-numbered containers	1.6712	1.2753	1.2152	6	1.8793	0.4709	0.4487	6	1.8597	0.3841	0.3660	6
PLASTIC		Composite packaging	50	0.5514	0.4571	0.4355	6	0.5441	0.3754	0.3577	6	0.6831	0.4521	0.4308
PLASTIC	Plastic Bags/Film	51 LDPE - Number 4	0.0557	0.0695	0.0662	6	0.0759	0.0566	0.0540	6	0.2192	0.3097	0.2951	6
PLASTIC		52 LDPE - Number 4 - not suitable for recovery	5.9369	3.0267	2.8841	6	3.7177	1.0944	1.0429	6	3.9641	2.4448	2.3296	6
PLASTIC		53 LDPE - Number 4 - Other bags, film packaging, wrap	5.3691	3.9683	3.7814	6	3.8244	0.7421	0.7071	6	3.4250	1.4987	1.4281	6
PLASTIC		54 PP - Number 5 - Agriculture	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
PLASTIC	Non-packaging End-of-Life Products	55 Crates, pails and tubs	0.2097	0.2073	0.1975	6	1.9732	1.8419	1.7552	6	1.1606	1.6038	1.5283	6
PLASTIC		56 Consumer goods	4.2014	3.7459	3.5694	6	4.1873	3.0685	2.9239	6	2.2642	3.3414	3.1840	6
PLASTIC		57 Non-program electronic products/components	0.2565	0.5634	0.5369	6	0.0622	0.1228	0.1170	6	0.2478	0.4702	0.4480	6
PLASTIC		58 Non-program paint products	0.1864	0.4790	0.4565	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
PLASTIC		59 Non-Municipal Hazardous and Special Waste	2.6870	4.9865	4.7516	6	0.2801	0.6164	0.5874	6	0.0970	0.1835	0.1748	6
DISP. CUPS	Fibre	60 Disposable cups - branded - hot	0.4618	0.3428	0.3267	6	0.8522	0.3441	0.3279	6	0.8562	0.3750	0.3573	6
DISP. CUPS		61 Disposable cups - branded - cold	0.0898	0.1160	0.1106	6	0.0572	0.0481	0.0458	6	0.0683	0.0582	0.0555	6
DISP. CUPS		62 Disposable cups - other	0.0241	0.0549	0.0523	6	0.0376	0.0514	0.0490	6	0.0300	0.0590	0.0562	6
DISP. CUPS	Plastic	63 Single use - branded	0.0475	0.0529	0.0504	6	0.0270	0.0527	0.0502	6	0.0131	0.0337	0.0321	6
DISP. CUPS		64 Single use - non-branded	0.0108	0.0276	0.0263	6	0.0768	0.1326	0.1263	6	0.0191	0.0391	0.0372	6
GLASS	Food and Consumer Goods Packaging	65 Clear - food containers	0.2849	0.7324	0.6979	6	0.6327	0.7359	0.7013	6	0.2515	0.5407	0.5153	6
GLASS		66 Coloured - food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS		67 Clear - non-food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS		68 Coloured - non-food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS	Automotive	69	0.1610	0.4140	0.3945	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
GLASS	Other Products	70	0.3519	0.5491	0.5232	6	0.5646	0.3219	0.3068	6	0.9492	1.1629	1.1081	6
METAL	Food and Consumer Goods Packaging	71 Aluminum food containers	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0083	0.0215	0.0204	6
METAL		72 Aluminum - other	0.3740	0.3164	0.3015	6	0.6692	0.4380	0.4173	6	0.6057	0.5533	0.5272	6
METAL		73 Steel food containers	0.3788	0.3524	0.3358	6	0.8312	0.7102	0.6768	6	1.4362	0.7262	0.6920	6
METAL		74 Steel composite containers	0.1656	0.1714	0.1633	6	0.3621	0.1348	0.1284	6	0.1612	0.2432	0.2317	6
METAL		75 Steel - other	1.6869	2.1177	2.0179	6	1.3839	1.9734	1.8804	6	1.9118	1.9056	1.8159	6
METAL	Non-Paint Program	76 Aluminum	0.0699	0.1111	0.1059	6	0.0000	0.0000	0.0000	6	0.0238	0.0613	0.0584	6
METAL	Pressurized	77 Steel	0.1681	0.2035	0.1940	6	0.1062	0.1258	0.1199	6	0.0590	0.0986	0.0940	6

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MATERIAL CATEGORY			Kaizer Meadow				Otter Lake				Queens			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
METAL	Non-Electronics	78 Appliances - small	0.1166	0.2996	0.2855	6	1.3168	1.8364	1.7499	6	3.2825	4.1180	3.9240	6
METAL	Program items	79 Appliances - large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL		80 Electronics - small	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL		81 Electronics - large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
METAL	Other	82 Extension cords and wire of uncertain materials	0.3051	0.4993	0.4758	6	0.1657	0.3764	0.3587	6	0.1383	0.3555	0.3387	6
MHSW	Pressurized gas	83 Non-refillable	0.0632	0.1624	0.1548	6	0.0000	0.0000	0.0000	6	0.0488	0.1255	0.1196	6
MHSW	containers	84 Re-fillable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Marine flares	85 by symbol or container type	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Mercury containing products	86 by symbol or container type	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Batteries	87 Non-rechargeable	0.2218	0.2570	0.2449	6	0.0896	0.1365	0.1300	6	0.2564	0.2004	0.1909	6
MHSW		88 Rechargeable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		89 Lithium-ion	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Sharps and Pharmaceuticals	90 None	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Pesticides and their	91 PCA regulated products	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	containers	92 Non-PCA regulated products	0.0347	0.0892	0.0850	6	0.0765	0.1967	0.1875	6	0.0000	0.0000	0.0000	6
MHSW	Automotive fluid	93 HDPE - Number 2	0.0775	0.1071	0.1021	6	0.0000	0.0000	0.0000	6	0.0373	0.0731	0.0697	6
MHSW	containers	94 PP - Number 5	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW		95 Other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Other fluids, fuel,	96 HDPE - Number 2	0.0000	0.0000	0.0000	6	0.0664	0.1490	0.1420	6	0.0000	0.0000	0.0000	6
MHSW	lubricants &	97 Other	0.4550	1.1153	1.0628	6	0.0000	0.0000	0.0000	6	0.1718	0.3254	0.3101	6
MHSW	Solvents and	98	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	containers													
MHSW	Corrosives and	99	0.0729	0.1873	0.1785	6	0.0188	0.0354	0.0337	6	0.0000	0.0000	0.0000	6
MHSW	(Crankshaft) oil filters	100	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
MHSW	Oily rags	101	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
TEXTILES	Fabric	102 Clothing	5.6098	4.2032	4.0052	6	4.6249	4.1123	3.9186	6	6.3782	3.9332	3.7479	6
TEXTILES		103 Household use	0.7964	1.4532	1.3847	6	0.7283	1.0231	0.9749	6	1.0050	1.7939	1.7094	6
TEXTILES	Footwear	104	0.6320	0.7497	0.7144	6	0.4217	0.3445	0.3283	6	1.3686	1.0822	1.0312	6
TEXTILES	Other	105	2.1359	2.3377	2.2275	6	0.5960	0.5325	0.5074	6	3.1658	2.1730	2.0706	6
C&D	Wood	106 dimensional - clean	0.1732	0.1845	0.1758	6	5.6617	8.6458	8.2385	6	0.9897	1.5197	1.4481	6
C&D		107 dimensional - coated	2.4729	3.7817	3.6036	6	0.4367	1.0126	0.9649	6	0.0000	0.0000	0.0000	6
C&D		108 engineered/composite - clean	0.0545	0.1401	0.1335	6	1.4307	3.1586	3.0098	6	0.0113	0.0291	0.0277	6
C&D		109 engineered/composite - coated	0.2512	0.6458	0.6154	6	0.3506	0.7195	0.6856	6	0.0939	0.2414	0.2300	6
C&D		110 pressure-treated	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Wallboard and	111 drywall - clean	0.0607	0.1561	0.1487	6	0.1291	0.3318	0.3162	6	0.2713	0.5148	0.4905	6
C&D	coverings	112 drywall - coated	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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MATERIAL CATEGORY			Kaizer Meadow				Otter Lake				Queens			
			Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
C&D	Shingles	113 asphalt	1.0862	2.5498	2.4297	6	0.0128	0.0328	0.0312	6	0.0000	0.0000	0.0000	6
C&D		114 other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Flooring	115 carpet	0.0000	0.0000	0.0000	6	0.7938	0.9946	0.9478	6	1.0041	1.4014	1.3353	6
C&D		116 other	0.2855	0.7339	0.6993	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Insulation	117 fibreglass	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	1.3918	3.5778	3.4092	6
C&D		118 foam (PS)	0.3469	0.8916	0.8496	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		119 other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Glass	120 window/door	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		121 decorative	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Countertops	122 laminate	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D		123 slate/marble	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
C&D	Ceiling Tile	124 None	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS	Furniture	125 mattresses - coil	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		126 mattresses - foam	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		127 mattresses - futon	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		128 box spring	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		129 upholstered - seating	0.3035	0.7802	0.7434	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		130 solid wood	0.4100	1.0539	1.0043	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		131 engineered/laminate wood	0.0000	0.0000	0.0000	6	0.1148	0.2951	0.2812	6	0.0000	0.0000	0.0000	6
BULKY ITEMS		132 other (non-plastic)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
SP. CARE WASTE	Diapers	133	13.3489	13.1678	12.5475	6	5.8176	5.2428	4.9958	6	7.9551	4.4271	4.2186	6
SP. CARE WASTE	Other	134 Medical gloves, pharmaceuticals, cosmetics	1.3253	1.2305	1.1725	6	1.3319	2.2875	2.1797	6	0.3091	0.7249	0.6908	6
RED. CONTAINERS	Beverage	135 Sort 1 - Aluminum cans	0.1803	0.1274	0.1214	6	0.2703	0.1689	0.1609	6	0.2967	0.2455	0.2340	6
RED. CONTAINERS		136 Sort 2 - Glass - clear	0.1676	0.4307	0.4104	6	0.1621	0.3354	0.3196	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		137 Sort 3 - PET - clear	0.3134	0.4485	0.4274	6	0.5817	0.5626	0.5361	6	0.8352	0.7919	0.7546	6
RED. CONTAINERS		138 Sort 4 - Glass -coloured	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		139 Sort 5 - PET - green	0.0085	0.0218	0.0208	6	0.0872	0.0923	0.0880	6	0.0685	0.0457	0.0436	6
RED. CONTAINERS		140 Sort 6 - Other plastic (3, 5, 6 &7)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		141 Sort 8 - Steel cans	0.0973	0.1909	0.1819	6	0.0000	0.0000	0.0000	6	0.1064	0.2012	0.1917	6
RED. CONTAINERS		142 Sort 9 - Gable top	0.0091	0.0235	0.0224	6	0.0000	0.0000	0.0000	6	0.0101	0.0259	0.0246	6
RED. CONTAINERS		143 Sort 10 - Tetra pak	0.1119	0.1447	0.1379	6	0.1017	0.1001	0.0953	6	0.1228	0.1106	0.1054	6
RED. CONTAINERS		144 Sort 11 - HDPE - translucent	0.0000	0.0000	0.0000	6	0.0219	0.0384	0.0365	6	0.0048	0.0122	0.0116	6
RED. CONTAINERS		145 Sort 13 - PET - blue	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		146 Sort 21 - Glass - clear (over 500 ml)	0.1583	0.4068	0.3877	6	0.0000	0.0000	0.0000	6	0.2070	0.5320	0.5069	6
RED. CONTAINERS		147 Sort 22 - Glass - coloured (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		148 Sort 23 - Liquor PET - clear and coloured (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.2279	0.4319	0.4115	6
RED. CONTAINERS		149 Sort 24 - Liquor PET - clear and coloured	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		150 Sort 25 - Liquor - other	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
RED. CONTAINERS		151 Sort 26 - Liquor - other (over 500 ml)	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

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REGULATED PAINT	Empty plastic	152	0.0633	0.1627	0.1551	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REGULATED PAINT	Empty metal	153	0.1069	0.1738	0.1656	6	0.0000	0.0000	0.0000	6	0.0629	0.1618	0.1542	6
REGULATED PAINT	Empty aerosols	154	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REGULATED TIRES	Passenger and Light Truck	155	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REGULATED TIRES	Tractor Trailer	156	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES	Non-Tire Program	157 Small	0.5916	1.5207	1.4490	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES	items	158 Large	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Computers	159 Desktop	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS		160 Portable	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Computer Peripherals	161	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Desktop Printers	162	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Display Devices	163	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Personal/Portable A/V Systems	164	0.6314	1.6230	1.5465	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Vehicle A/V Systems	165	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Theatre in a Box	166	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Audio/Video Systems	167	0.3289	0.8455	0.8056	6	1.4809	3.8067	3.6274	6	0.4966	0.7880	0.7509	6
REG. ELECTRONICS	Non-cellular telephones	168	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Cellular telephones	169	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000	6

RRFB 2011 Waste Audit Study
Statistical Analysis

Residential

MATERIAL CATEGORY			West Hants			
			Mean (%)	95% CI	Std. dev.	No. samples
FIBRE	Uncoated Paper - newsprint quality	1 Dailies	0.6197	0.8946	0.8524	6
FIBRE		2 Weeklies	0.0000	0.0000	0.0000	6
FIBRE		3 Magazines - uncoated	0.0000	0.0000	0.0000	6
FIBRE		4 Flyers/inserts - uncoated	0.7688	0.3493	0.3328	6
FIBRE		5 Telephone Books/Yellow Pages	0.0000	0.0000	0.0000	6
FIBRE	Coated Paper - catalogue quality	6 Magazines - glossy	0.4323	0.5313	0.5063	6
FIBRE		7 Catalogues/Calendars	0.2668	0.3215	0.3063	6
FIBRE		8 Flyers/inserts - glossy	0.2362	0.1469	0.1400	6
FIBRE	Books	9 Hard cover	0.3643	0.8522	0.8120	6
FIBRE		10 Soft cover	0.9796	1.1400	1.0863	6
FIBRE	Mixed Fines	11 None	2.7936	3.4403	3.2782	6
FIBRE	Other	12 Specialized purpose	0.2463	0.2549	0.2429	6
FIBRE	Packaging	13 Boxboard cardboard - single layer	4.0398	1.6428	1.5654	6
FIBRE		14 Corrugated cardboard - multi layer - dry	1.1041	1.1315	1.0782	6
FIBRE		15 Waxed corrugated cardboard - multi-layer	0.1370	0.3522	0.3357	6
FIBRE		16 Fast-food boxboard	0.1640	0.2116	0.2016	6
FIBRE		17 Fast-food wrap	0.0376	0.0929	0.0886	6
FIBRE		18 Molded Pulp	0.3151	0.3950	0.3764	6
FIBRE		19 Kraft paper bags/wrap	1.2066	1.4381	1.3704	6
FIBRE		20 Laminated paper bags/boxboard	0.1228	0.1550	0.1477	6
ORGANICS	Food Waste	21 Home/ICI food waste not in containers (see 24)	13.4664	4.8335	4.6058	6
ORGANICS	Tissue	22 Facial tissue and gift wrapping paper tissue	4.4678	3.1296	2.9822	6
ORGANICS	Yard Waste	23 Home/ICI gardening, brush, leaves	1.8354	2.8465	2.7124	6
ORGANICS	Other	24 Food in containers, including weight of containers	1.8328	2.2187	2.1142	6
ORGANICS	Fibre	25 Wet paper and cardboard	0.2076	0.4860	0.4631	6
DAIRY	Beverage - Dairy milk only	26 Polycoat (gable top) - 1 litre and greater	0.1328	0.2582	0.2460	6
DAIRY		27 Polycoat (gable top) - less than 1 litre	0.0357	0.0700	0.0667	6
DAIRY		28 Plastic jug (HDPE - Number 2) - 1 litre and greater	0.0271	0.0695	0.0663	6
DAIRY		29 Plastic jug (HDPE - Number 2) - less than 1 litre	0.0780	0.1263	0.1204	6
DAIRY		30 Tetra pak	0.0000	0.0000	0.0000	6
DAIRY		31 Plastic bag (LDPE film - Number 4)	0.0026	0.0066	0.0063	6
DAIRY	Ice Cream	32 Plastic container (HDPE - Number 2)	0.0544	0.0646	0.0615	6
DAIRY		33 Boxboard container (with lining)	0.0760	0.1295	0.1234	6
DAIRY	Other Dairy	34 Plastic container (HDPE - #2, PP - #5, PS - #6)	0.0000	0.0000	0.0000	6
DAIRY		35 Plastic container (other than 2, 5 and 6)	0.0000	0.0000	0.0000	6
DAIRY		36 Tetra pak	0.0000	0.0000	0.0000	6
DAIRY	Non-fluid Milk Product	37 Plastic film	0.0000	0.0000	0.0000	6
NON-DAIRY	Beverage - Non-Dairy	38 Polycoat (gable top)	0.0000	0.0000	0.0000	6

RRFB 2011 Waste Audit Study
Statistical Analysis

Residential

MATERIAL CATEGORY			West Hants			
			Mean (%)	95% CI	Std. dev.	No. samples
NON-DAIRY	alternatives	39 Plastic container	0.0000	0.0000	0.0000	6
NON-DAIRY		40 Tetra pak	0.0000	0.0000	0.0000	6
NON-DAIRY	Foodstuffs	41 Tetra pak	0.0000	0.0000	0.0000	6
PLASTIC	Food and other container packaging	42 PET - Number 1	0.8805	0.2584	0.2463	6
PLASTIC		43 HDPE - Number 2	0.4860	0.1855	0.1767	6
PLASTIC		44 PVC - Number 3	0.0638	0.0596	0.0568	6
PLASTIC		45 LDPE - Number 4	0.0049	0.0126	0.0120	6
PLASTIC		46 PP - Number 5	0.5074	0.3541	0.3375	6
PLASTIC		47 PS - Number 6	1.9032	1.1864	1.1305	6
PLASTIC		48 Other - Number 7	0.0752	0.1132	0.1079	6
PLASTIC		49 Non-numbered containers	1.6999	0.8506	0.8105	6
PLASTIC	Composite packaging	50	0.5185	0.7563	0.7207	6
PLASTIC	Plastic Bags/Film	51 LDPE - Number 4	0.3340	0.6435	0.6132	6
PLASTIC		52 LDPE - Number 4 - not suitable for recovery	3.5460	1.4752	1.4057	6
PLASTIC		53 LDPE - Number 4 - Other bags, film packaging, wrap	3.1243	1.8037	1.7188	6
PLASTIC		54 PP - Number 5 - Agriculture	0.3155	0.8111	0.7729	6
PLASTIC	Non-packaging End-of-Life Products	55 Crates, pails and tubs	1.1413	1.1910	1.1349	6
PLASTIC		56 Consumer goods	2.3854	1.3842	1.3190	6
PLASTIC		57 Non-program electronic products/components	1.2778	2.6689	2.5432	6
PLASTIC		58 Non-program paint products	0.0000	0.0000	0.0000	6
PLASTIC		59 Non-Municipal Hazardous and Special Waste	0.3086	0.6726	0.6409	6
DISP. CUPS	Fibre	60 Disposable cups - branded - hot	1.6404	1.1504	1.0962	6
DISP. CUPS		61 Disposable cups - branded - cold	0.2149	0.3131	0.2983	6
DISP. CUPS		62 Disposable cups - other	0.1883	0.2882	0.2747	6
DISP. CUPS	Plastic	63 Single use - branded	0.0750	0.0818	0.0779	6
DISP. CUPS		64 Single use - non-branded	0.2124	0.2323	0.2214	6
GLASS	Food and Consumer Goods Packaging	65 Clear - food containers	0.4701	0.7210	0.6870	6
GLASS		66 Coloured - food containers	0.0000	0.0000	0.0000	6
GLASS		67 Clear - non-food containers	0.0000	0.0000	0.0000	6
GLASS		68 Coloured - non-food containers	0.0000	0.0000	0.0000	6
GLASS	Automotive	69	0.0000	0.0000	0.0000	6
GLASS	Other Products	70	0.3141	0.3926	0.3741	6
METAL	Food and Consumer Goods Packaging	71 Aluminum food containers	0.0000	0.0000	0.0000	6
METAL		72 Aluminum - other	0.4835	0.4241	0.4041	6
METAL		73 Steel food containers	0.1932	0.3364	0.3205	6
METAL		74 Steel composite containers	0.0896	0.1050	0.1001	6
METAL		75 Steel - other	1.4186	2.6612	2.5358	6
METAL	Non-Paint Program	76 Aluminum	0.0000	0.0000	0.0000	6
METAL	Pressurized	77 Steel	0.1570	0.2047	0.1950	6

RRFB 2011 Waste Audit Study
Statistical Analysis

Residential

MATERIAL CATEGORY			West Hants			
			Mean (%)	95% CI	Std. dev.	No. samples
METAL	Non-Electronics	78 Appliances - small	1.0050	1.8309	1.7447	6
METAL	Program items	79 Appliances - large	0.0000	0.0000	0.0000	6
METAL		80 Electronics - small	0.0000	0.0000	0.0000	6
METAL		81 Electronics - large	0.0000	0.0000	0.0000	6
METAL	Other	82 Extension cords and wire of uncertain materials	0.2183	0.5611	0.5347	6
MHSW	Pressurized gas containers	83 Non-refillable	0.0000	0.0000	0.0000	6
MHSW		84 Re-fillable	0.0000	0.0000	0.0000	6
MHSW	Marine flares	85 by symbol or container type	0.0000	0.0000	0.0000	6
MHSW	Mercury containing products	86 by symbol or container type	0.0000	0.0000	0.0000	6
MHSW	Batteries	87 Non-rechargeable	0.0959	0.2179	0.2076	6
MHSW		88 Rechargeable	0.0000	0.0000	0.0000	6
MHSW		89 Lithium-ion	0.0000	0.0000	0.0000	6
MHSW	Sharps and Pharmaceuticals	90 None	0.0000	0.0000	0.0000	6
MHSW	Pesticides and their containers	91 PCA regulated products	0.0000	0.0000	0.0000	6
MHSW		92 Non-PCA regulated products	0.0000	0.0000	0.0000	6
MHSW	Automotive fluid containers	93 HDPE - Number 2	0.0234	0.0601	0.0572	6
MHSW		94 PP - Number 5	0.3129	0.8043	0.7664	6
MHSW		95 Other	0.0129	0.0331	0.0315	6
MHSW	Other fluids, fuel, lubricants &	96 HDPE - Number 2	0.0000	0.0000	0.0000	6
MHSW		97 Other	0.0000	0.0000	0.0000	6
MHSW	Solvents and containers	98	0.0000	0.0000	0.0000	6
MHSW	Corrosives and	99	0.0000	0.0000	0.0000	6
MHSW	(Crankshaft) oil filters	100	0.0000	0.0000	0.0000	6
MHSW	Oily rags	101	0.0000	0.0000	0.0000	6
TEXTILES	Fabric	102 Clothing	13.2484	13.2094	12.5872	6
TEXTILES		103 Household use	1.5156	1.6255	1.5489	6
TEXTILES	Footwear	104	2.3075	3.5522	3.3848	6
TEXTILES	Other	105	0.4959	0.8942	0.8521	6
C&D	Wood	106 dimensional - clean	1.9086	3.0563	2.9123	6
C&D		107 dimensional - coated	0.9982	2.1386	2.0379	6
C&D		108 engineered/composite - clean	0.8594	1.0529	1.0033	6
C&D		109 engineered/composite - coated	1.4673	3.3378	3.1805	6
C&D		110 pressure-treated	0.5164	1.3275	1.2650	6
C&D	Wallboard and coverings	111 drywall - clean	3.9043	5.9947	5.7123	6
C&D		112 drywall - coated	0.0000	0.0000	0.0000	6

RRFB 2011 Waste Audit Study
Statistical Analysis

Residential

MATERIAL CATEGORY			West Hants			
			Mean (%)	95% CI	Std. dev.	No. samples
C&D	Shingles	113 asphalt	0.0000	0.0000	0.0000	6
C&D		114 other	0.0000	0.0000	0.0000	6
C&D	Flooring	115 carpet	0.9303	2.3914	2.2787	6
C&D		116 other	0.8778	1.4761	1.4066	6
C&D	Insulation	117 fibreglass	0.0000	0.0000	0.0000	6
C&D		118 foam (PS)	0.0000	0.0000	0.0000	6
C&D		119 other	0.0000	0.0000	0.0000	6
C&D	Glass	120 window/door	0.0000	0.0000	0.0000	6
C&D		121 decorative	0.0000	0.0000	0.0000	6
C&D	Countertops	122 laminate	0.0000	0.0000	0.0000	6
C&D		123 slate/marble	0.0000	0.0000	0.0000	6
C&D	Ceiling Tile	124 None	0.0000	0.0000	0.0000	6
BULKY ITEMS	Furniture	125 mattresses - coil	0.0000	0.0000	0.0000	6
BULKY ITEMS		126 mattresses - foam	0.0000	0.0000	0.0000	6
BULKY ITEMS		127 mattresses - futon	0.0000	0.0000	0.0000	6
BULKY ITEMS		128 box spring	0.0000	0.0000	0.0000	6
BULKY ITEMS		129 upholstered - seating	0.3197	0.8218	0.7831	6
BULKY ITEMS		130 solid wood	0.9099	2.3389	2.2287	6
BULKY ITEMS		131 engineered/laminate wood	0.0000	0.0000	0.0000	6
BULKY ITEMS		132 other (non-plastic)	0.6116	1.5721	1.4981	6
SP. CARE WASTE	Diapers	133	3.3123	5.7532	5.4822	6
SP. CARE WASTE	Other	134 Medical gloves, pharmaceuticals, cosmetics	1.6670	3.1707	3.0213	6
RED. CONTAINERS	Beverage	135 Sort 1 - Aluminum cans	0.7619	1.7037	1.6234	6
RED. CONTAINERS		136 Sort 2 - Glass - clear	0.1797	0.2209	0.2105	6
RED. CONTAINERS		137 Sort 3 - PET - clear	0.3063	0.3003	0.2862	6
RED. CONTAINERS		138 Sort 4 - Glass -coloured	0.0000	0.0000	0.0000	6
RED. CONTAINERS		139 Sort 5 - PET - green	0.0266	0.0432	0.0412	6
RED. CONTAINERS		140 Sort 6 - Other plastic (3, 5, 6 &7)	0.0000	0.0000	0.0000	6
RED. CONTAINERS		141 Sort 8 - Steel cans	0.0000	0.0000	0.0000	6
RED. CONTAINERS		142 Sort 9 - Gable top	0.0000	0.0000	0.0000	6
RED. CONTAINERS		143 Sort 10 - Tetra pak	0.1319	0.1729	0.1647	6
RED. CONTAINERS		144 Sort 11 - HDPE - translucent	0.0000	0.0000	0.0000	6
RED. CONTAINERS		145 Sort 13 - PET - blue	0.0073	0.0187	0.0178	6
RED. CONTAINERS		146 Sort 21 - Glass - clear (over 500 ml)	0.0000	0.0000	0.0000	6
RED. CONTAINERS		147 Sort 22 - Glass - coloured (over 500 ml)	0.1285	0.3304	0.3148	6
RED. CONTAINERS		148 Sort 23 - Liquor PET - clear and coloured (over 500 ml)	0.0000	0.0000	0.0000	6
RED. CONTAINERS		149 Sort 24 - Liquor PET - clear and coloured	0.0000	0.0000	0.0000	6
RED. CONTAINERS		150 Sort 25 - Liquor - other	0.0000	0.0000	0.0000	6
RED. CONTAINERS		151 Sort 26 - Liquor - other (over 500 ml)	0.0000	0.0000	0.0000	6

RRFB 2011 Waste Audit Study
Statistical Analysis

Residential

MATERIAL CATEGORY			West Hants			
			Mean (%)	95% CI	Std. dev.	No. samples
REGULATED PAINT	Empty plastic	152	0.0000	0.0000	0.0000	6
REGULATED PAINT	Empty metal	153	0.8590	1.2827	1.2223	6
REGULATED PAINT	Empty aerosols	154	0.0000	0.0000	0.0000	6
REGULATED TIRES	Passenger and Light Truck	155	0.0000	0.0000	0.0000	6
REGULATED TIRES	Tractor Trailer	156	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES	Non-Tire Program	157 Small	0.0000	0.0000	0.0000	6
OFF-ROAD TIRES	items	158 Large	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Computers	159 Desktop	0.0000	0.0000	0.0000	6
REG. ELECTRONICS		160 Portable	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Computer Peripherals	161	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Desktop Printers	162	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Display Devices	163	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Personal/Portable A/V Systems	164	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Vehicle A/V Systems	165	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Theatre in a Box	166	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Home Audio/Video Systems	167	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Non-cellular telephones	168	0.0000	0.0000	0.0000	6
REG. ELECTRONICS	Cellular telephones	169	0.0000	0.0000	0.0000	6

APPENDIX F

Statistical Analysis – Groups of Categories for 2011 Waste Audit Project

RRFB 2011 Waste Audit Study
Statistical Analysis

Tonnes	Metric Tons	
	ICI	Residential
Colchester	15103	6810
Cumberland	4249	5494
Guysborough	4249	5494
Kaizer Meadow	16780	17991
Otter Lake	84573	55987
Queens	9426	9858
West Hants	6397	6762
Sum	140777	108396

ICI	Overall (all landfills) tonnage*		Colchester		Cumberland		Guysborough	
	Tons	% of total	Mean (%)	Tons	Mean (%)	Tons	Mean (%)	Tons
	FIBRE	26550	18.9	14.1439	2136	12.0254	511	15.0244
ORGANICS	38363	27.3	44.6479	6743	24.0658	1023	23.1936	985
DAIRY	564	0.4	1.0645	161	0.6202	26	0.3025	13
NON-DAIRY	7	0.0	0.0000	0	0.0000	0	0.0033	0
PLASTIC	28560	20.3	14.0892	2128	18.4827	785	21.0060	893
DISPOSABLE CUPS	5554	3.9	1.1122	168	1.0649	45	1.3779	59
GLASS	782	0.6	0.4434	67	0.0000	0	0.7702	33
METAL	3305	2.3	1.7701	267	3.7230	158	1.3137	56
Municipal Hazardous and Special Waste (MHSW)	507	0.4	0.7888	119	0.2379	10	0.1197	5
TEXTILES	10932	7.8	7.3941	1117	17.1446	728	18.3120	778
C&D	5856	4.2	10.5383	1592	6.7884	288	5.9439	253
BULKY ITEMS	1519	1.1	0.2682	41	0.6951	30	0.1990	8
SPECIAL CARE WASTE	15210	10.8	1.3824	209	12.0169	511	9.5732	407
REDEEMABLE CONTAINERS	2480	1.8	1.4505	219	1.6995	72	0.6495	28
REGULATED PAINT	198	0.1	0.1111	17	0.9484	40	0.5152	22
REGULATED TIRES	164	0.1	0.0000	0	0.0000	0	0.6971	30
OFF-ROAD TIRES	13	0.0	0.0000	0	0.0000	0	0.3154	13
REGULATED ELECTRONICS	213	0.2	0.7954	120	0.4872	21	0.6834	29

*Tonnes are estimated using total ICI waste arriving at respective landfill within 12 months starting April 2009 and percentage contribution from this study

Residential	Overall (all landfills) tonnage*		Colchester		Cumberland		Guysborough	
	Tons	% of total	Mean (%)	Tons	Mean (%)	Tons	Mean (%)	Tons
	FIBRE	12088	11.2	11.7976	803	10.8632	597	13.6478
ORGANICS	35631	32.9	33.2309	2263	38.0675	2091	38.7747	2130
DAIRY	655	0.6	0.3771	26	0.6480	36	0.4527	25
NON-DAIRY	17	0.0	0.0000	0	0.0450	2	0.0232	1
PLASTIC	22712	21.0	19.6945	1341	19.3553	1063	18.8280	1034
DISPOSABLE CUPS	1203	1.1	1.2840	87	1.7679	97	1.1234	62
GLASS	1373	1.3	1.4228	97	3.8748	213	1.4110	78
METAL	5051	4.7	3.7051	252	5.0175	276	4.2781	235
Municipal Hazardous and Special Waste (MHSW)	558	0.5	0.5501	37	1.2491	69	1.1647	64
TEXTILES	9656	8.9	13.1923	898	10.3929	571	10.9998	604
C&D	7336	6.8	1.3428	91	1.4276	78	4.2092	231
BULKY ITEMS	464	0.4	0.0000	0	2.1102	116	0.5652	31
SPECIAL CARE WASTE	8922	8.2	11.4754	781	3.8628	212	2.4382	134
REDEEMABLE CONTAINERS	1402	1.3	1.7018	116	0.8709	48	1.3678	75
REGULATED PAINT	111	0.1	0.0000	0	0.2677	15	0.0313	2
REGULATED TIRES	6	0.0	0.0000	0	0.0000	0	0.1157	6
OFF-ROAD TIRES	106	0.1	0.0000	0	0.0000	0	0.0000	0
REGULATED ELECTRONICS	1107	1.0	0.2256	15	0.1797	10	0.5691	31

*Tonnes are estimated using total residential waste arriving at respective landfill within 12 months starting April 2009 and percentage contribution from this study

RRFB 2011 Waste Audit Study
Statistical Analysis

ICI	Kaizer Meadow		Otter Lake		Queens		West Hants	
	Mean (%)	Tons	Mean (%)	Tons	Mean (%)	Tons	Mean (%)	Tons
	FIBRE	11.7070	1964	21.4907	18175	17.4432	1644	23.1496
ORGANICS	31.2111	5237	22.7534	19243	35.5613	3352	27.8096	1779
DAIRY	0.3080	52	0.2688	227	0.7972	75	0.1508	10
NON-DAIRY	0.0088	1	0.0065	5	0.0000	0	0.0000	0
PLASTIC	20.3372	3413	22.0759	18670	14.5663	1373	20.2975	1298
DISPOSABLE CUPS	3.8755	650	5.0561	4276	2.8506	269	1.3553	87
GLASS	1.0303	173	0.5055	427	0.7498	71	0.1727	11
METAL	3.4751	583	1.9648	1662	3.5921	339	3.7562	240
Municipal Hazardous and Special Waste (MHSW)	1.5209	255	0.0243	21	0.2819	27	1.1033	71
TEXTILES	6.9369	1164	7.1690	6063	7.1205	671	6.4242	411
C&D	9.0694	1522	2.0509	1735	1.9605	185	4.4098	282
BULKY ITEMS	2.9937	502	0.8996	761	0.0000	0	2.7667	177
SPECIAL CARE WASTE	4.8374	812	13.8655	11726	12.9041	1216	5.1511	330
REDEEMABLE CONTAINERS	1.9290	324	1.8690	1581	1.9216	181	1.1811	76
REGULATED PAINT	0.6258	105	0.0000	0	0.0296	3	0.1707	11
REGULATED TIRES	0.0000	0	0.0000	0	0.0000	0	2.1014	134
OFF-ROAD TIRES	0.0000	0	0.0000	0	0.0000	0	0.0000	0
REGULATED ELECTRONICS	0.1339	22	0.0000	0	0.2213	21	0.0000	0

Residential	Kaizer Meadow		Otter Lake		Queens		West Hants	
	Mean (%)	Tons	Mean (%)	Tons	Mean (%)	Tons	Mean (%)	Tons
	FIBRE	11.5196	2072	10.8213	6059	8.8613	874	13.8000
ORGANICS	26.4884	4766	34.6013	19372	35.8568	3535	21.8000	1474
DAIRY	0.2666	48	0.7704	431	0.6272	62	0.4070	28
NON-DAIRY	0.0074	1	0.0205	11	0.0000	0	0.0000	0
PLASTIC	24.0349	4324	21.2955	11923	17.9435	1769	18.6000	1258
DISPOSABLE CUPS	0.6339	114	1.0508	588	0.9867	97	2.3300	158
GLASS	0.7979	144	1.1973	670	1.2007	118	0.7840	53
METAL	3.2649	587	4.8350	2707	7.6269	752	3.5700	241
Municipal Hazardous and Special Waste (MHSW)	0.9250	166	0.2514	141	0.5143	51	0.4450	30
TEXTILES	9.1741	1651	6.3708	3567	11.9175	1175	17.6000	1190
C&D	4.7311	851	8.8154	4935	3.7621	371	11.5000	778
BULKY ITEMS	0.7135	128	0.1148	64	0.0000	0	1.8400	124
SPECIAL CARE WASTE	14.6742	2640	7.1495	4003	8.2642	815	4.9800	337
REDEEMABLE CONTAINERS	1.0464	188	1.2250	686	1.8792	185	1.5400	104
REGULATED PAINT	0.1702	31	0.0000	0	0.0629	6	0.8590	58
REGULATED TIRES	0.0000	0	0.0000	0	0.0000	0	0.0000	0
OFF-ROAD TIRES	0.5916	106	0.0000	0	0.0000	0	0.0000	0
REGULATED ELECTRONICS	0.9603	173	1.4809	829	0.4966	49	0.0000	0

**RRFB 2011 Waste Audit Study
Statistical Analysis**

ICI

	All landfills (estimated*)		Colchester				Cumberland				Guysborough			
	Tons	% of total	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
FIBRE	26550	18.9	14.1	7.15	6.82	6	12.0	5.73	5.46	6	15.0	6.31	6.01	6
ORGANICS	38363	27.3	44.6	23.12	22.03	6	24.1	8.25	7.86	6	23.2	8.53	8.13	6
DAIRY	564	0.4	1.1	1.23	1.18	6	0.6	0.64	0.61	6	0.3	0.23	0.22	6
NON-DAIRY	7	0.0	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.0	0.01	0.01	6
PLASTIC	28560	20.3	14.1	6.05	5.77	6	18.5	3.99	3.80	6	21.0	5.28	5.03	6
DISPOSABLE CUPS	5554	3.9	1.1	0.91	0.86	6	1.1	0.44	0.42	6	1.4	1.15	1.10	6
GLASS	782	0.6	0.4	0.51	0.48	6	0.0	0.00	0.00	6	0.8	0.64	0.61	6
METAL	3305	2.3	1.8	2.06	1.97	6	3.7	0.64	0.61	6	1.3	0.95	0.90	6
Municipal Hazardous and Special Waste (MHSW)	507	0.4	0.8	0.73	0.69	6	0.2	0.34	0.33	6	0.1	0.16	0.16	6
TEXTILES	10932	7.8	7.4	7.95	7.58	6	17.1	10.66	10.15	6	18.3	5.94	5.66	6
C&D	5856	4.2	10.5	20.84	19.86	6	6.8	2.12	2.02	6	5.9	7.01	6.68	6
BULKY ITEMS	1519	1.1	0.3	0.44	0.42	6	0.7	1.79	1.70	6	0.2	0.51	0.49	6
SPECIAL CARE WASTE	15210	10.8	1.4	1.67	1.59	6	12.0	10.23	9.75	6	9.6	12.12	11.55	6
REDEEMABLE CONTAINERS	2480	1.8	1.5	1.18	1.13	6	1.7	0.86	0.82	6	0.6	0.52	0.50	6
REGULATED PAINT	198	0.1	0.1	0.19	0.18	6	0.9	1.45	1.38	6	0.5	0.89	0.85	6
REGULATED TIRES	164	0.1	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.7	1.79	1.71	6
OFF-ROAD TIRES	13	0.0	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.3	0.81	0.77	6
REGULATED ELECTRONICS	213	0.2	0.8	1.17	1.11	6	0.5	0.63	0.60	6	0.7	1.04	0.99	6

*Tonnes are estimated using total ICI waste arriving at respective landfill within 12 months starting April 2009 and percentage contribution from this study

Residential

	All landfills (estimated*)		Colchester				Cumberland				Guysborough			
	Tons	% of total	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
FIBRE	12088	11.2	11.8	2.96	2.82	6	10.9	6.08	5.79	6	13.6	3.02	2.87	6
ORGANICS	35631	32.9	33.2	13.77	13.12	6	38.1	7.08	6.75	6	38.8	9.14	8.71	6
DAIRY	655	0.6	0.4	0.32	0.31	6	0.6	0.57	0.55	6	0.5	0.53	0.51	6
NON-DAIRY	17	0.0	0.0	0.00	0.00	6	0.0	0.12	0.11	6	0.0	0.06	0.06	6
PLASTIC	22712	21.0	19.7	8.33	7.94	6	19.4	7.36	7.02	6	18.8	6.75	6.43	6
DISPOSABLE CUPS	1203	1.1	1.3	0.45	0.43	6	1.8	0.66	0.62	6	1.1	1.05	1.00	6
GLASS	1373	1.3	1.4	1.73	1.64	6	3.9	2.46	2.35	6	1.4	1.14	1.09	6
METAL	5051	4.7	3.7	2.27	2.16	6	5.0	3.83	3.65	6	4.3	2.38	2.27	6
Municipal Hazardous and Special Waste (MHSW)	558	0.5	0.6	0.52	0.50	6	1.2	0.85	0.81	6	1.2	1.71	1.63	6
TEXTILES	9656	8.9	13.2	5.32	5.07	6	10.4	7.15	6.81	6	11.0	5.73	5.46	6
C&D	7336	6.8	1.3	1.44	1.38	6	1.4	0.75	0.72	6	4.2	3.91	3.72	6
BULKY ITEMS	464	0.4	0.0	0.00	0.00	6	2.1	5.42	5.17	6	0.6	1.01	0.96	6
SPECIAL CARE WASTE	8922	8.2	11.5	4.53	4.31	6	3.9	4.18	3.98	6	2.4	2.49	2.38	6
REDEEMABLE CONTAINERS	1402	1.3	1.7	2.37	2.26	6	0.9	0.72	0.69	6	1.4	1.11	1.05	6
REGULATED PAINT	111	0.1	0.0	0.00	0.00	6	0.3	0.41	0.39	6	0.0	0.08	0.08	6
REGULATED TIRES	6	0.0	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.1	0.30	0.28	6
OFF-ROAD TIRES	106	0.1	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.0	0.00	0.00	6
REGULATED ELECTRONICS	1107	1.0	0.2	0.43	0.41	6	0.2	0.22	0.21	6	0.6	1.42	1.35	6

*Tonnes are estimated using total residential waste arriving at respective landfill within 12 months starting April 2009 and percentage contribution from this study

RRFB 2011 Waste Audit Study
Statistical Analysis

ICI

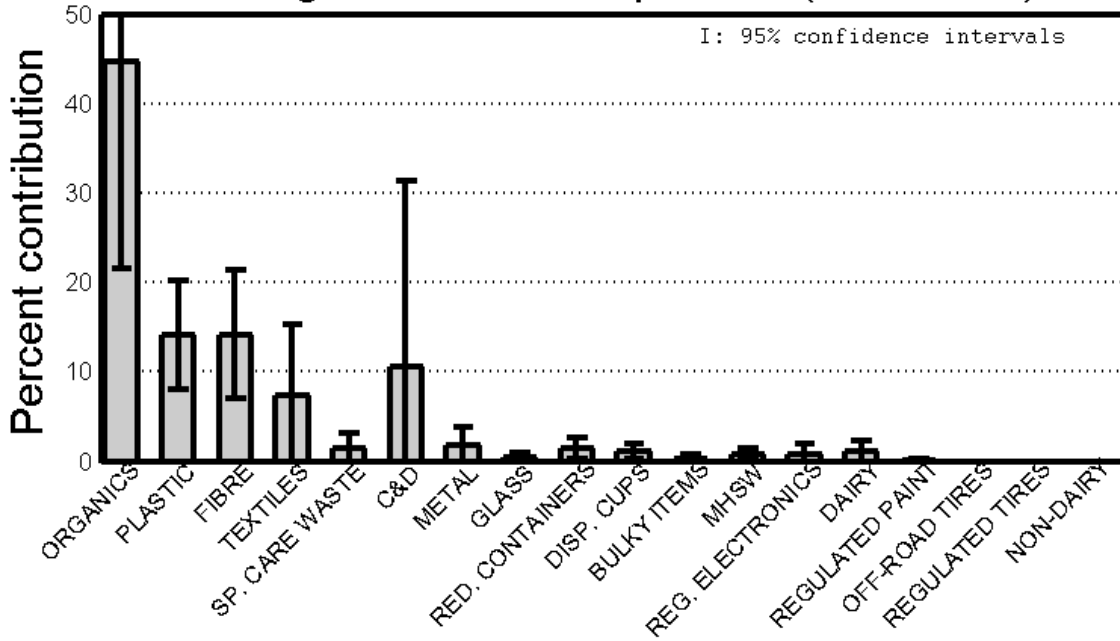
	Kaizer Meadow				Otter Lake				Queens				West Hants			
	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
FIBRE	11.7	4.78	4.56	6	21.5	5.68	5.41	6	17.4	5.54	5.28	6	23.1	11.14	10.62	6
ORGANICS	31.2	9.16	8.73	6	22.8	8.09	7.71	6	35.6	11.70	11.15	6	27.8	11.05	10.53	6
DAIRY	0.3	0.30	0.29	6	0.3	0.36	0.34	6	0.8	0.95	0.91	6	0.2	0.29	0.28	6
NON-DAIRY	0.0	0.02	0.02	6	0.0	0.02	0.02	6	0.0	0.00	0.00	6	0.0	0.00	0.00	6
PLASTIC	20.3	3.86	3.68	6	22.1	6.03	5.75	6	14.6	3.63	3.46	6	20.3	4.02	3.84	6
DISPOSABLE CUPS	3.9	5.88	5.60	6	5.1	5.18	4.94	6	2.9	2.98	2.84	6	1.4	1.06	1.01	6
GLASS	1.0	1.46	1.39	6	0.5	0.58	0.55	6	0.7	0.68	0.64	6	0.2	0.29	0.27	6
METAL	3.5	1.76	1.68	6	2.0	1.97	1.88	6	3.6	3.99	3.81	6	3.8	2.11	2.01	6
Municipal Hazardous and Special Waste (MHSW)	1.5	1.39	1.32	6	0.0	0.06	0.05	6	0.3	0.45	0.43	6	1.1	2.13	2.03	6
TEXTILES	6.9	3.62	3.45	6	7.2	6.19	5.90	6	7.1	6.49	6.18	6	6.4	4.32	4.11	6
C&D	9.1	11.66	11.11	6	2.1	1.60	1.52	6	2.0	2.69	2.57	6	4.4	4.98	4.75	6
BULKY ITEMS	3.0	7.70	7.33	6	0.9	1.57	1.49	6	0.0	0.00	0.00	6	2.8	5.37	5.12	6
SPECIAL CARE WASTE	4.8	6.31	6.01	6	13.9	17.44	16.62	6	12.9	14.47	13.79	6	5.2	6.51	6.21	6
REDEEMABLE CONTAINERS	1.9	1.97	1.87	6	1.9	1.10	1.05	6	1.9	1.08	1.03	6	1.2	0.79	0.75	6
REGULATED PAINT	0.6	1.14	1.09	6	0.0	0.00	0.00	6	0.0	0.08	0.07	6	0.2	0.33	0.32	6
REGULATED TIRES	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.0	0.00	0.00	6	2.1	5.40	5.15	6
OFF-ROAD TIRES	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.0	0.00	0.00	6
REGULATED ELECTRONICS	0.1	0.34	0.33	6	0.0	0.00	0.00	6	0.2	0.57	0.54	6	0.0	0.00	0.00	6

Residential

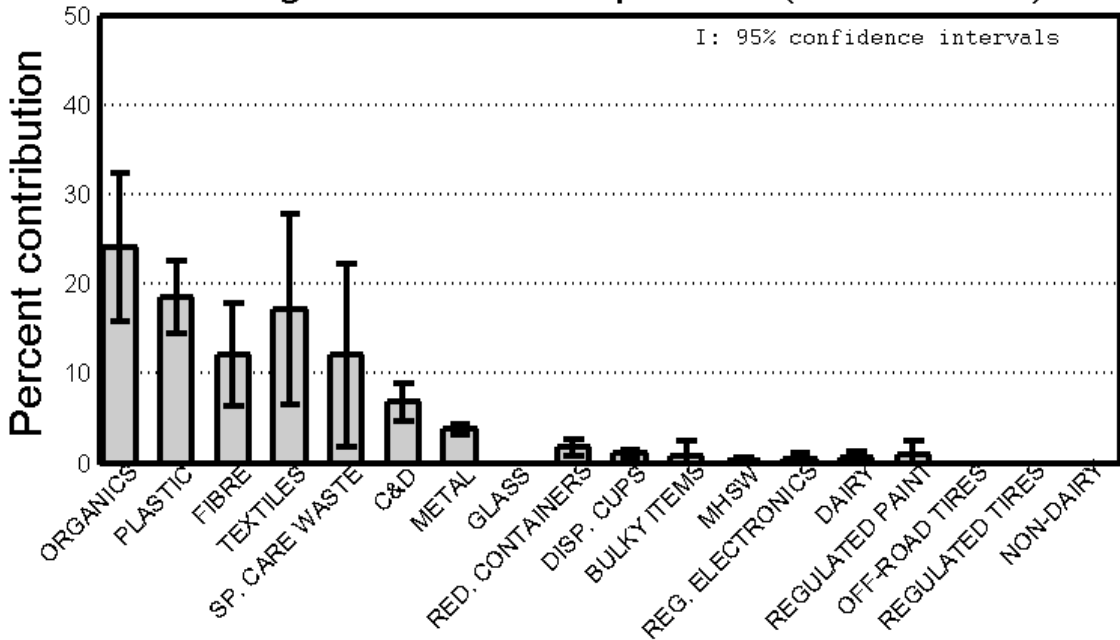
	Kaizer Meadow				Otter Lake				Queens				West Hants			
	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples	Mean (%)	95% CI	Std. dev.	No. samples
FIBRE	11.5	6.66	6.34	6	10.8	3.60	3.43	6	8.9	5.04	4.81	6	13.8	3.54	3.37	6
ORGANICS	26.5	9.36	8.92	6	34.6	9.45	9.00	6	35.9	10.37	9.88	6	21.8	6.79	6.47	6
DAIRY	0.3	0.25	0.24	6	0.8	0.95	0.90	6	0.6	0.77	0.73	6	0.4	0.28	0.27	6
NON-DAIRY	0.0	0.02	0.02	6	0.0	0.03	0.03	6	0.0	0.00	0.00	6	0.0	0.00	0.00	6
PLASTIC	24.0	9.27	8.83	6	21.3	5.06	4.83	6	17.9	3.41	3.25	6	18.6	6.42	6.12	6
DISPOSABLE CUPS	0.6	0.42	0.40	6	1.1	0.47	0.45	6	1.0	0.38	0.36	6	2.3	1.26	1.20	6
GLASS	0.8	1.48	1.41	6	1.2	0.98	0.93	6	1.2	1.53	1.46	6	0.8	0.91	0.87	6
METAL	3.3	2.56	2.44	6	4.8	1.92	1.83	6	7.6	4.71	4.49	6	3.6	3.21	3.06	6
Municipal Hazardous and Special Waste (MHSW)	0.9	1.19	1.13	6	0.3	0.16	0.15	6	0.5	0.58	0.55	6	0.4	0.76	0.73	6
TEXTILES	9.2	5.90	5.63	6	6.4	4.10	3.90	6	11.9	4.57	4.35	6	17.6	14.60	13.93	6
C&D	4.7	7.06	6.73	6	8.8	13.27	12.65	6	3.8	3.43	3.27	6	11.5	13.20	12.62	6
BULKY ITEMS	0.7	1.18	1.12	6	0.1	0.30	0.28	6	0.0	0.00	0.00	6	1.8	3.24	3.08	6
SPECIAL CARE WASTE	14.7	14.18	13.51	6	7.1	6.31	6.01	6	8.3	4.63	4.42	6	5.0	8.79	8.38	6
REDEEMABLE CONTAINERS	1.0	1.31	1.25	6	1.2	0.87	0.83	6	1.9	1.85	1.76	6	1.5	1.37	1.31	6
REGULATED PAINT	0.2	0.30	0.29	6	0.0	0.00	0.00	6	0.1	0.16	0.15	6	0.9	1.28	1.22	6
REGULATED TIRES	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.0	0.00	0.00	6
OFF-ROAD TIRES	0.6	1.52	1.45	6	0.0	0.00	0.00	6	0.0	0.00	0.00	6	0.0	0.00	0.00	6
REGULATED ELECTRONICS	1.0	1.67	1.59	6	1.5	3.81	3.63	6	0.5	0.79	0.75	6	0.0	0.00	0.00	6

Illustration of Statistical Analysis, Groups of Categories (Bar Charts) for 2011 Waste Audit Project

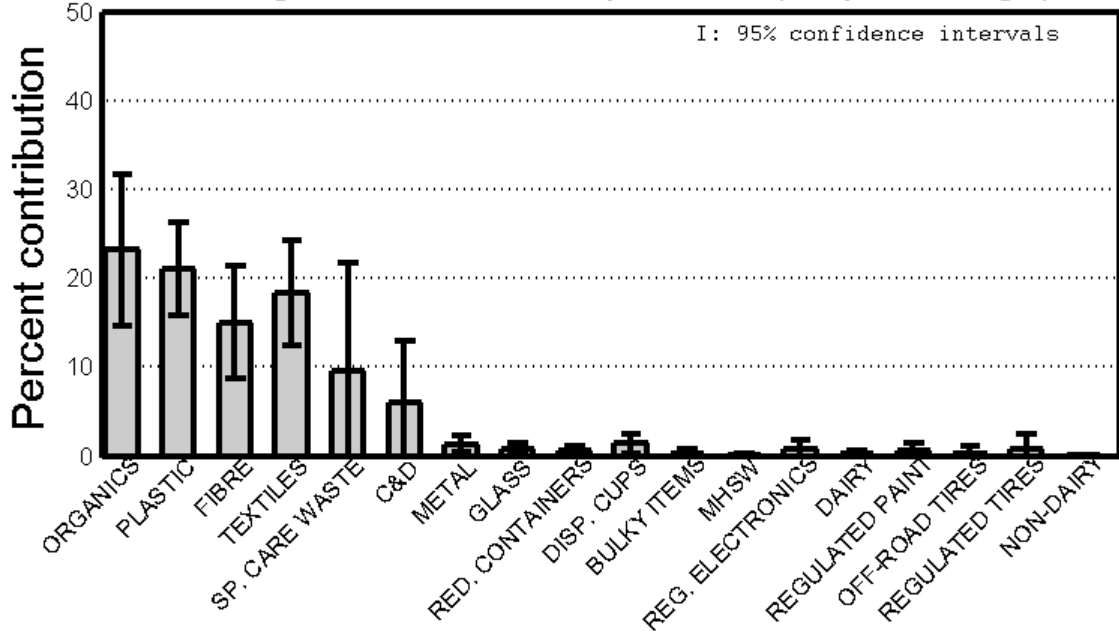
Average ICI waste composition (Colchester)



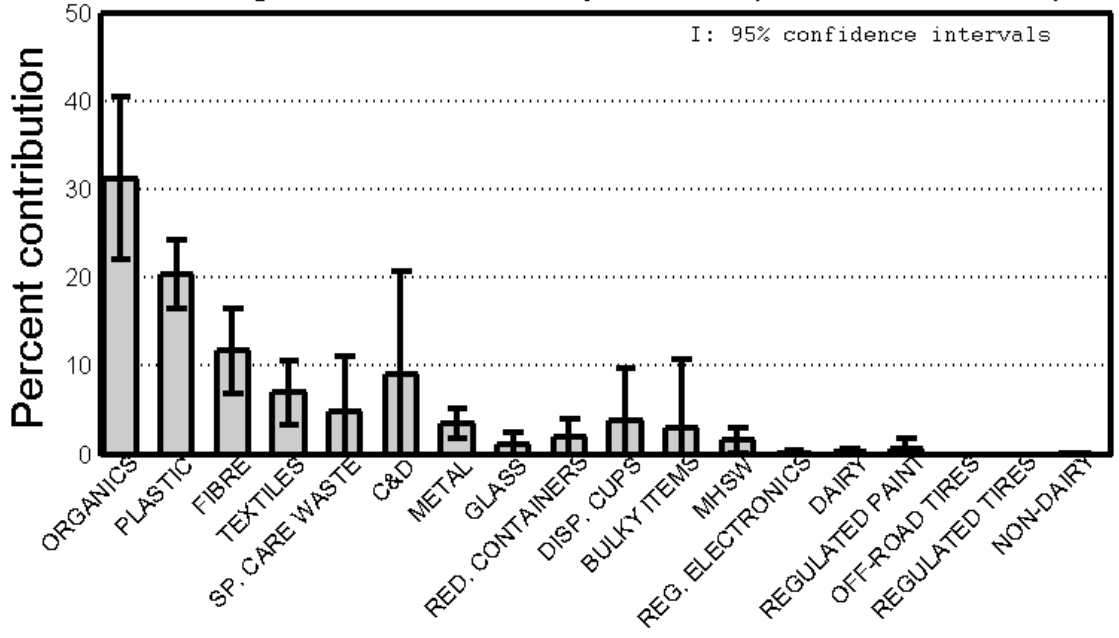
Average ICI waste composition (Cumberland)



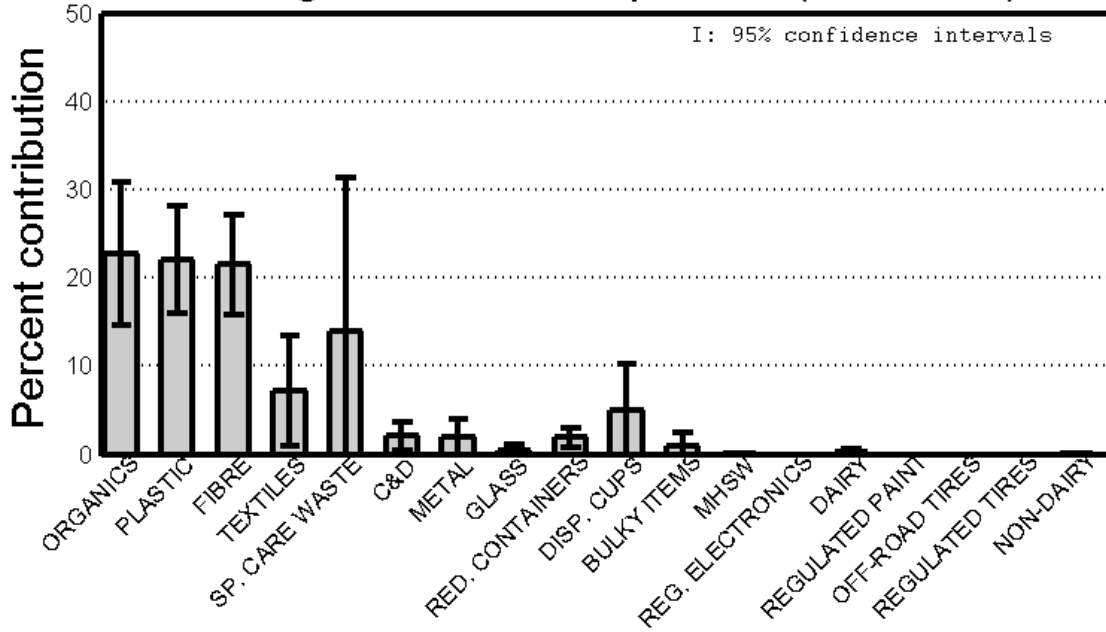
Average ICI waste composition (Guysborough)



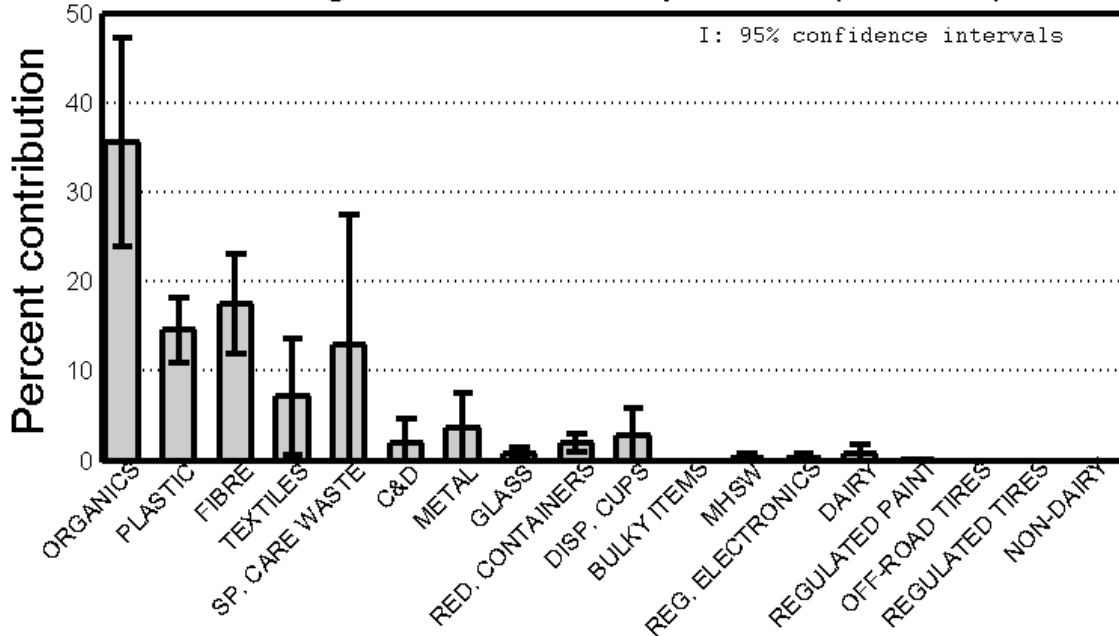
Average ICI waste composition (Kaizer Meadow)



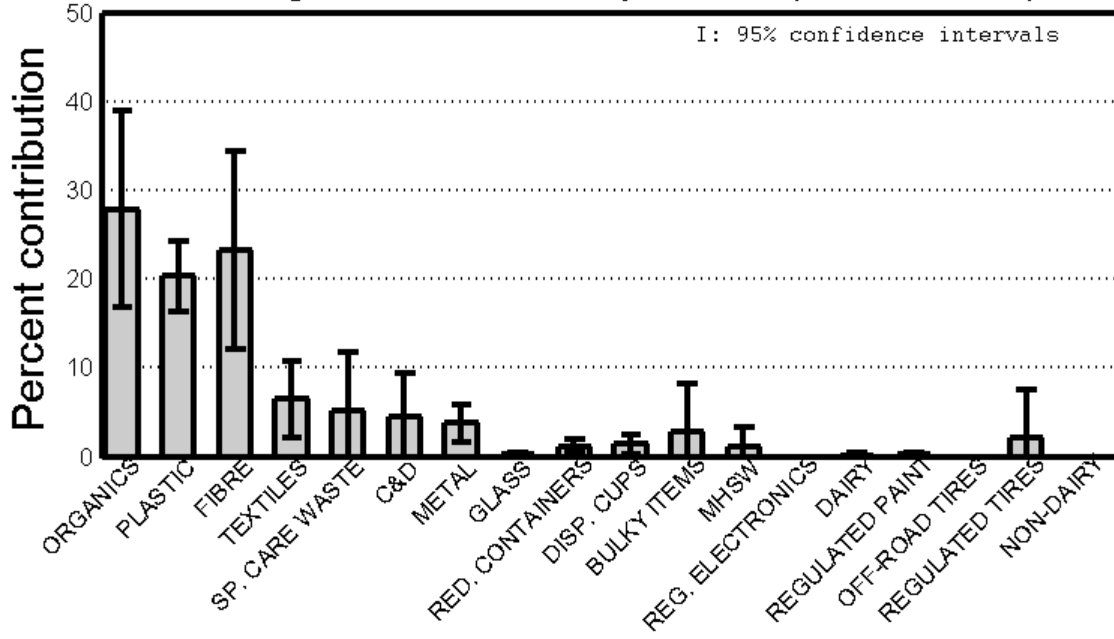
Average ICI waste composition (Otter Lake)



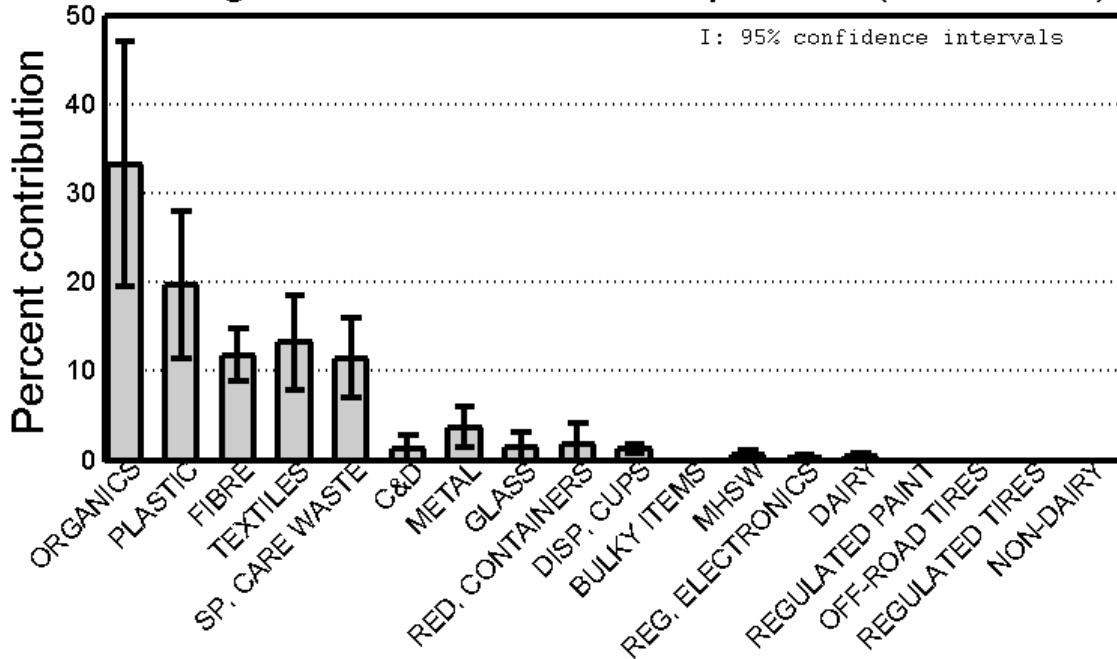
Average ICI waste composition (Queens)



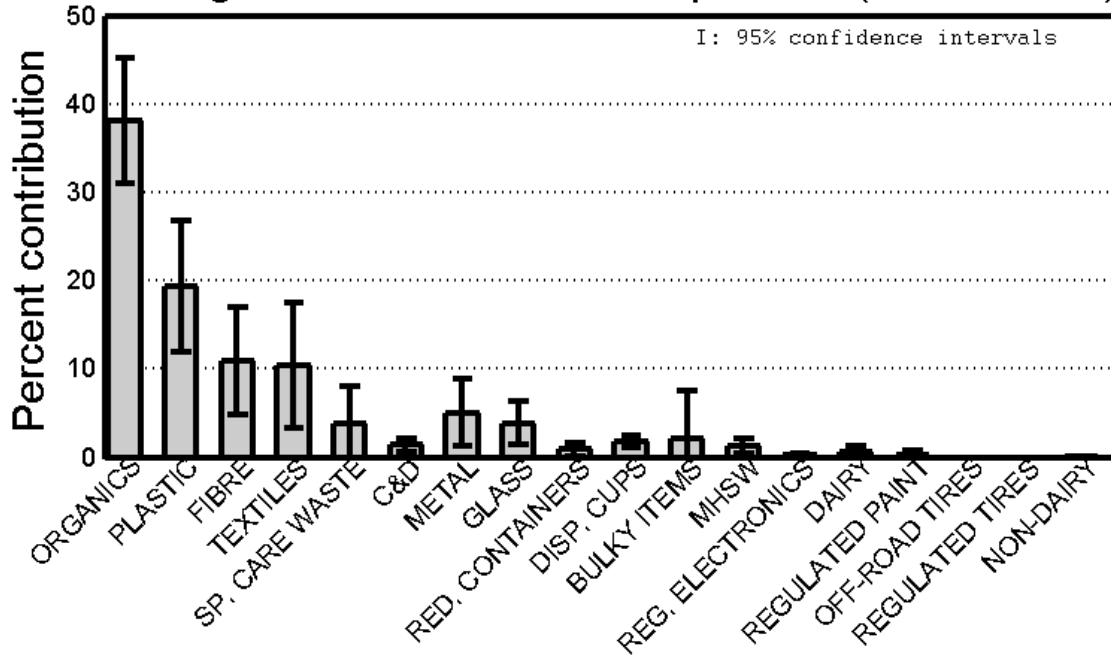
Average ICI waste composition (West Hants)



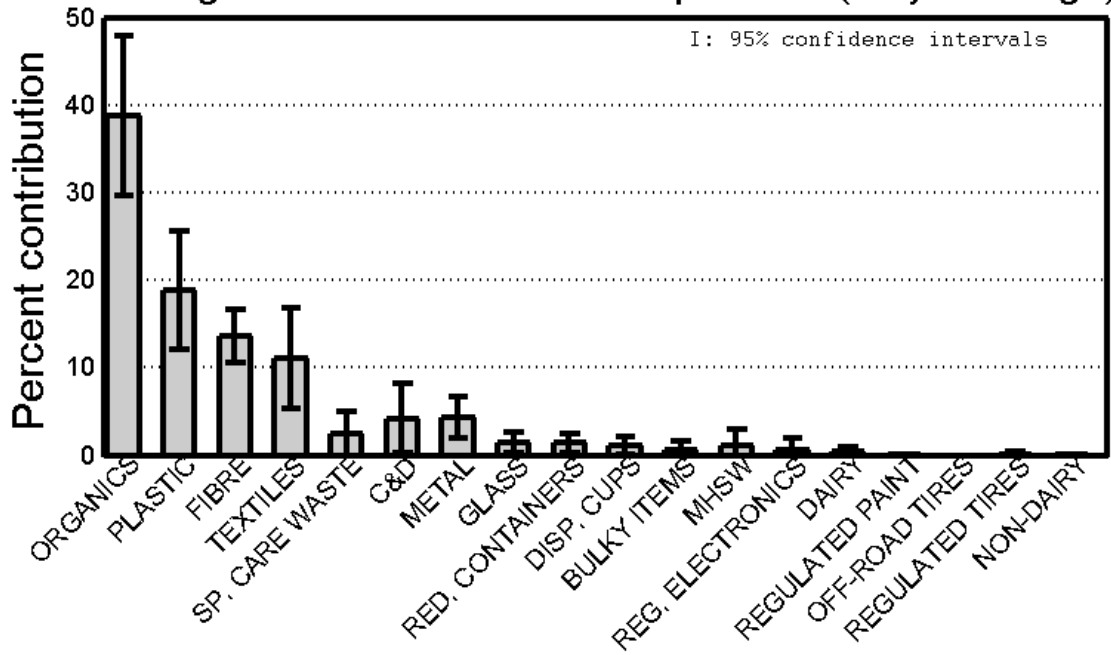
Average residential waste composition (Colchester)



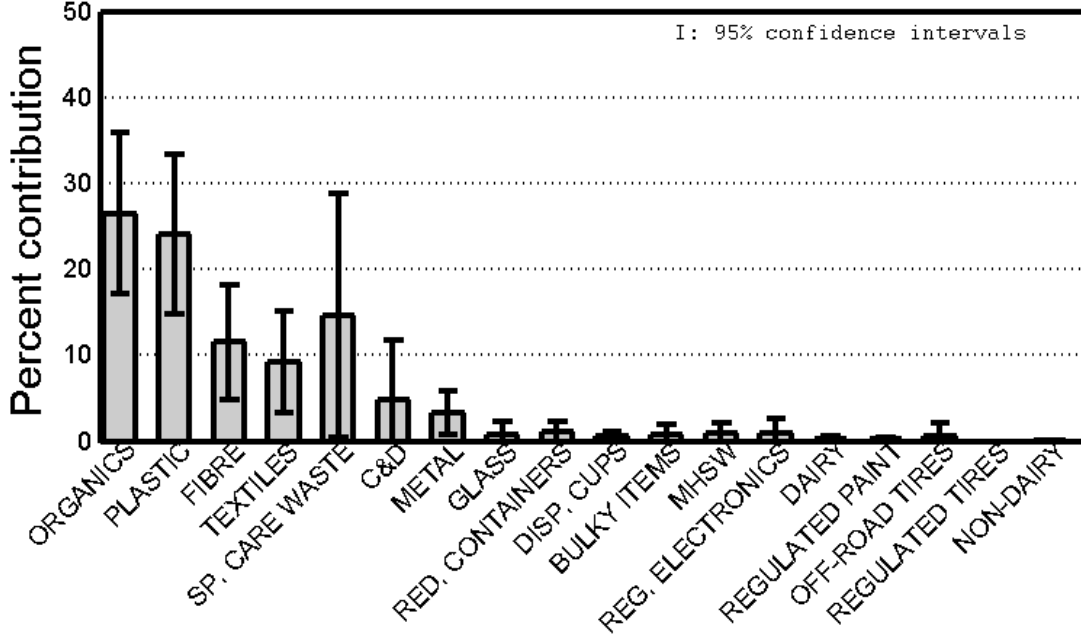
Average residential waste composition (Cumberland)



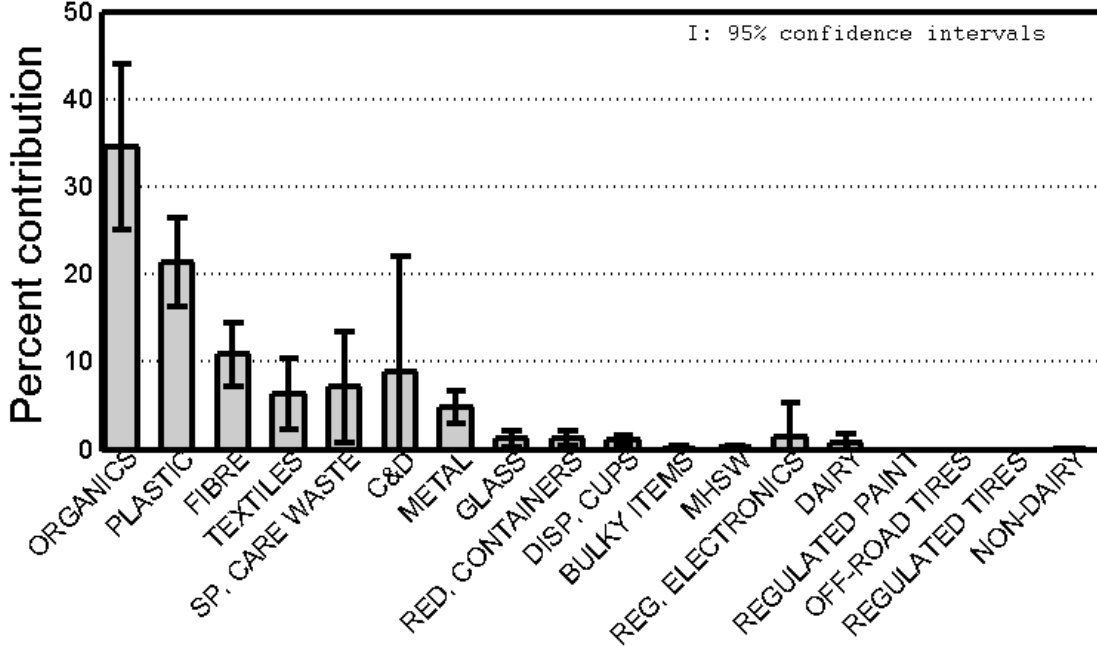
Average residential waste composition (Guysborough)



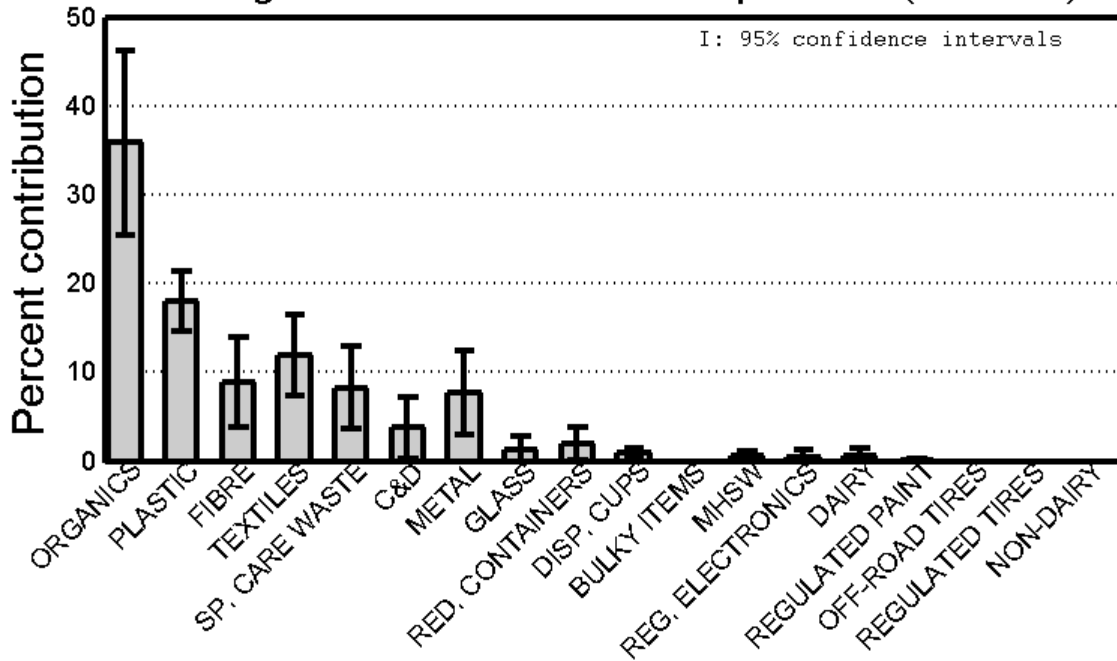
Average residential waste composition (Kaizer Meadow)



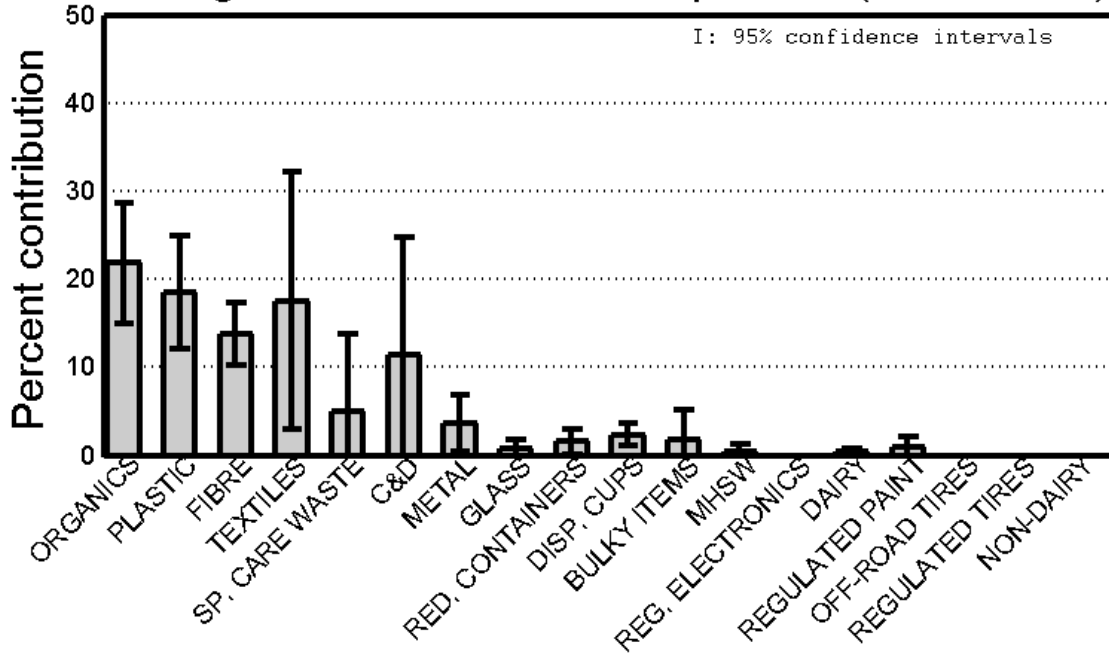
Average residential waste composition (Otter Lake)



Average residential waste composition (Queens)



Average residential waste composition (West Hants)



APPENDIX H

Contacts with Other Jurisdictions for Information on Manuals for 2011 Waste Audit Project

RRFB Waste Audit Services Project 2011: Results of Contacts with Canadian and American Federal, State, Provincial and Territorial Governments Asking for Current Practice Manuals

	Contact	Contact Name	Contact Title	Date of Contact		Email	Reply	Notes/Comments
				Attempt	Phone			
	CANADA							
Federal	CCME	Laura Manson		1-Jun-11	W 204-918-6881 C 204-948-2865	lmanson@ccme.ca		CCME offers 2 documents for guidance (1996 and 1999)
NGO	BNQ	Michelle Drolet	Secretary	2-Jun-11	418-652-2238 x2610			n/a
Provincial	Alberta	Josh McGregor	Ministers Special Assistant	2-Jun-11	780-427-2391	josh.mcgregor@gov.ab.ca		Do not have any audit methodology documents however Ontario contact provided document.
	British Columbia	Jack Bryden	Section Head - Solid and Liquid Waste	1-Jun-11	250-387-9985	jack.bryden@gov.bc.ca		Do not have any audit methodology documents however are going to tender to develop same
	Manitoba	Laurie Streich	Director of Pollution Prevention	2-Jun-11	204-945-7482	laurie.streich@gov.mb.ca		Work with consultant to choose method that gives the province the information they need.
	New Brunswick	Jeff Porter	Solid Waste	1-Jun-11	506-453-7945	jeffrey.porter@gnb.ca		Do not have any audit methodology documents
	Newfoundland	Marie Ryan	Senior Environmental Scientist	1-Jun-11	709 729-1810	ryanm@gov.nl.ca		Do not have any audit methodology documents
	Northwest Territories	Diep Duong	Solid Waste Specialist	2-Jun-11	867-873-7178	diep_duong@gov.nt.ca		Do not have any audit methodology documents
	Nunavut	Bill Westwell	Senior Municipal Planner	2-Jun-11	867-975-5461	bwestwell@gov.nu.ca		Going to tender to develop document
	Ontario	Stephen Jones	Senior Policy Advisor - Waste Audits	2-Jun-11	416-314-4633	stephen.jones@ontario.ca		Have guide for ICI.
	PEI	Gerry Moore	CEO	1-Jun-11	1-902-894-0330	gmoore@iwmc.pe.ca		Do not have any audit methodology documents
	Quebec	Alain Lavoie	Direction des matières résiduelles et des lieux contaminés	2-Jun-11	(418) 521-3950 x 4803	alain.lavoie1@mddep.gouv.qc.ca		RFP document containing methodology-Aug 2010
	Saskatchewan	Blake Nesbitt	Manager Landfills	2-Jun-11	306-787-0038	blake.nesbitt@gov.sk.ca		Methodology left up to discretion of consultant conducting audit
	Yukon	Shannon Jensen	Manager, Standards and Approvals Section	1-Jun-11	867-667-8787	shannon.jensen@gov.yk.ca		Have ICI method, Res: consultant developed method with government representatives
	USA							
Alabama	Alabama Department of Environmental Management	Ed Poolos	Field Operations Director	7-Jun-11	334-271-7730			No Manual
Alaska	Alaska Dept. of Environmental Conservation	Bob Blankenburg	Program Manager	9-Jun-11	907-269-7581			No manual
Arizona	Arizona Dept. of Environmental Quality	Mindy Cross	Compliance Manager	6-Jun-11	602-771-4218	cross.mindi@azdeg.gov		No Manual
Arkansas	Arkansas Dept. of Environmental Quality	Scott McWilliams	Solid Waste Management Coord	8-Jun-11	501-682-0582			No manual
California	California Dept. of Resources Recycling and Recovery	Jeff Hackett	Diversions and Recycling Division	8-Jun-11	916-341-6413			http://calrecycle.ca.gov/wastechar/WasteStudies.htm
Colorado	Colorado Dept. of Public Health and Environment	Jim Trent	Enforcement Officer	7-Jun-11	303-692-2000			No Manual
Connecticut	Connecticut Dept. for Environmental Protection	Sarah Hargis	Solid Waste Specialist	6-Jun-11	860-424-3366			No manual
Delaware	Delaware Solid Waste Authority (DSWA)	Logan Miller	Solid Waste Specialist	6-Jun-11	302-739-5361			No manual
Florida	Florida Central Protection Agency	Jack Price	Environmental Manager	6-Jun-11	850-245-8705	john.l.price@dep.state.fl.us		Waste Calc. software http://www.dep.state.fl.us/wastecalc/index.html + http://www.floridacenter.org/publications/discarded_waste_composition_96-1.pdf
	Florida Central Protection Agency	Shannan Reynolds	Recycling Program Manager	6-Jun-11	850-245-8716	shannan.reynolds@dep.state.fl.us		
Georgia	Georgia Dept. of Community Affairs	Joe Taylor	Solid Waste Specialist	6-Jun-11	404-679-1598			http://www.dca.ga.gov/development/EnvironmentalManagement/publications/GeorgiaMSWCharacterizationStudy.pdf
Hawaii	Hawaii Dept. of Environmental Management	Greg Goodale	Division Chief	8-Jun-11	808-961-8515			No manual
Idaho	Idaho Dept. of Environmental Quality	Ben Jarvis	Waste Management Coordinator	7-Jun-11	208-373-0146			No Manual
Illinois	Illinois Counties Solid Waste Management Association			10-Jun-11		info@ilcswma.org		http://www2.illinois.gov/green/Documents/Waste%20Study.pdf
	Illinois Environmental Protection Agency	Dave Walters	Waste Reduction and Compliance	9-Jun-11	217-785-3300			see above
Indiana	Indiana Dept. for Environmental Protection	Tracey Barnes	Solid Waste Specialist	6-Jun-11	800-451-6027			No manual
Iowa	Iowa Dept. of Natural Resources	Tom Anderson	Land Quality Bureau	10-Jun-11	515-281-8623			No Manual

RRFB Waste Audit Services Project 2011: Results of Contacts with Canadian and American Federal, State, Provincial and Territorial Governments Asking for Current Practice Manuals

	Contact	Contact Name	Contact Title	Date of Contact		Email	Reply	Notes/Comments
				Attempt	Phone			
Kansas	Kansas Bureau of Waste Management	Dennis Degner	Environmental Engineer	10-Jun-11	785-296-1600			Manual available in hard copy. Created by independant consultant
	Kansas, Engineering Solutions & Design	Jack Chapelle	Consultant that did study	10-Jun-11	800-298-1851			Did study and determined methodology
Kentucky	Kentucky Dept. for Environmental Protection	Jennie Perry	Program Coordinator	6-Jun-11	502-564-6716 x4604			No manual
Louisiana	Louisiana Solid Waste Association	Connie Ferguson	Solid Waste Specialist	7-Jun-11	985-878-4403			No manual
Maine	Maine Resource Recovery Association	Victor Horton	Executive Director	7-Jun-11	207-942-6772			No manual
Maryland	Maryland Dept. for Environmental Proection	Steve Mitchell	Solid Waste Specialist	7-Jun-11	410-537-3314			No manual
Massachusetts	Massachusetts Dept. for Environmental Proection	James Doucet	Solid Waste Specialist	8-Jun-11	617-292-5868			No manual
Michigan	Michigan Dept. of Environmental Quality	Matt Flechter	Recycling and Composting Coordinator	7-Jun-11	517-373-8422	flechterm@michigan.gov		No manual
Minnesota	Minnesota Pollution Control Agency	Wayne Gjerde	Recycling Market Development Coordinator	8-Jun-11	651-757-2392	wayne.gjerde@moea.state.mn.us		No Manual
Mississippi	Mississippi Dept. of Environmental Quality	Trent Jones	Solid Waste Planning	10-Jun-11	601-961-5726			No manual
Missouri	Missouri Dept. of Natural Resources	Brenda Ardrey	Solid Waste Planning	10-Jun-11	573-751-5401			http://www.dnr.mo.gov/env/swmp/docs/wcs2008.pdf
Montana	Montana Dept. of Environmental Quality	Mary Hendrickson	Division of Solid Waste	10-Jun-11	406-444-1808			No manual
Nebraska	Nebraska Dept. of Environmental Quality	Steve Danahy	Supervisor, Waste Planning & Aid Unit	8-Jun-11	402-471-0273	steve.danahy@nebraska.gov		No Manual
Nevada	Nevada Division of Environmental Protection	Art Gravenstein	Solid Waste - Supervisor	3-Jun-11	775-687-9467			No manual
New Hampshire	New Hampshire Dept. of Environmental Services	Mike Guilfooy	Waste Management Specialist	8-Jun-11	603-271-6467			No manual
New Jersey	New Jersey Dept. of Environmental Protection	Chi Chang		8-Jun-11	609-633-1418			No manual
New Mexico	New Mexico Environment Department	Peter Murchland	Solid Waste Management	10-Jun-11	505-827-0197			No manual
New York	New York Dept. of Environmental Conservation	Gus Ramon	Waste Management Planner	10-Jun-11	518-402-8678			No manual
North Carolina	North Carolina Division of Waste Management	Ethan Brown	Municipal Waste Regulator	8-Jun-11	919-508-8501			No manual
North Dakota	North Dakota Solid Waste and Recycling Association	Jerry Volk	Executive Director	3-Jun-11	701-590-0488			No manual
Ohio	Ohio Dept. for Evironmental Protection	Andrew Booker	Ohio EPA	8-Jun-11	614-644-2621			No manual
Oklahoma	Oklahoma Dept. of Environmental Quality	Cindy Hales	Solid Waste Management	10-Jun-11	405-702-5100			No Manual
Oregon	Oregon Dept. of Environmental Quality	John Steel	Solid Waste Specialist	3-Jun-11	503-229-5696			No manual
Pennsylvania	Pennsylvania Dept. of Environmental Protection	Steve Socash	Division Chief, Municipal and Residual Waste	3-Jun-11	717-787-7381	ra-epmuniresdwaste@state.pa.us		No manual
Rhode Island	Rhode Island Dept. of Environmental Management	Chris Schaffer	Office of Waste Management	10-Jun-11	401-222-2797 x7143			No manual
South Carolina	South Carolina Dept. of Health and Environmental Control	Karla Isaac	Solid Waste Reporting	10-Jun-11	803-896-4223			No manual
South Dakota	South Dakota Dept. of Environment and Natural Resources	Bonnie Calomine	Waste Management Program	10-Jun-11	605-216-3256			No Manual
Tennessee	Tennessee Dept. of Environment & Conversation	Matt Mayner	Division of Solid and Hazardous Waste Management	9-Jun-11	615-532-0780			No Manual
Texas	Texas Commission on Environmental Quality	Wayne Harry	Solid Waste Management	10-Jun-11	512-239-2335			No Manual
Utah	Utah Dept. of Environmental Quality	Scott Anderson	Director	9-Jun-11	801-536-0200			No manual
Vermont	Vermont Dept. of Environmental Conservation	Teresa Hobbs	Solid Waste Management Planner	3-Jun-11	802-241-3838			No Manual
Virginia	Virginia Dept. of Environmental Quality	Jeffery Steers	Director of Solid Waste Management	3-Jun-11	804-698-4077			No Manual
Washington	Washington Dept. of Ecology	Madeleine Wall	Municipal Solid Waste Inspector	3-Jun-11	509-329-6383			No manual
West Virginia	West Virginia Solid Waste Management Board	Clint Hogbin	Recycling Coordinator	3-Jun-11	304-267-5111			No Manual
Wisconsin	Wisconsin Dept. of Natural Resources	Brad Wolbert	Hydrogeologist	8-Jun-11	608-264-6286	brad.wolbert@wisconsin.gov		http://dnr.wi.gov/org/aw/wm/recycle/WI_WCS_Final_Report_June-30-2010.pdf
Wyoming	Wyoming Dept. of Environmental Quality	Jean Faulkner	Solid Waste Planning	10-Jun-11	307-777-7752			No manual
Federal	USA Federal government: USEPA							Measuring Recycling: A Guide for State and Local Governments
NGO	ASTMI							Standard Test Method D5231-92 (Reapproved 2008)

APPENDIX I

Template for RRFB Waste Audit Manual for Future Waste Audits

Cover Page, in a format prescribed by RRFB

**Template for RRFB Waste Audit Manual
November 2011**

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Annexes

- A Exposition of Statistical Science Concerning Design of Number of Samples
- B Generic Field Procedures Manual

CHAPTER 1 **INTRODUCTION**

This manual provides guidance and detailed instructions for designing and conducting waste audits in Nova Scotia. It has been written in response to a defined need by RRFB Nova Scotia for a standard practice manual for ongoing use, in a manner which acknowledges circumstances specific to this province.

RRFB's interest in waste audits is related to its mandates, as legislated by the Province of Nova Scotia, Canada. RRFB is a not-for-profit corporation established by but operating at arm's length from the government, delegated (as of 2011) to administer several programs including:

- Beverage Container Program
- Used Tire Management Program
- Consumer Paint Product Stewardship Program

RRFB works in close concert with the seven solid waste-resource management regions in the province and Nova Scotia Environment (NSE) to seek out additional opportunities to divert materials from landfills. This challenge has been accentuated by recent legislation which demands reduction of landfill disposal to no more than 300 kg per capita annually, by the year 2015. Maximizing diversion of waste to beneficial uses represents a clear environmental benefit and as well an economic development opportunity.

Measuring Nova Scotia's progress to the waste diversion objective should be based on solid quantitative indicators of performance, such as percentages of waste diverted or presence of significant amounts of banned materials in landfills. Professionally designed and conducted waste audits also provide the accurate statistical information needed to identify and quantify materials which are being directed to final disposal, but which may have potential for diversion. The data from waste audits will enhance public education and all manner of waste management program and facility design processes. This manual will be beneficial in achieving the quality desired in waste audits, by standardizing the design and execution of waste audits carried out by or for the RRFB.

CHAPTER 2 **INTENDED USE OF THIS MANUAL**

This manual describes the methodology for waste audits of municipal solid waste streams with the objective of quantifying the relative contributions of waste of different types arriving at a sampling point, such as a landfill, transfer station, or material recovery facility. This type of waste audit is a “direct analysis”, wherein samples are taken and sorted into categories.

It is not intended to guide other types of waste audits carried out in other settings, e.g., to ascertain waste material by-product flows in industrial production facilities, measure the concentration of problematic constituents in hazardous waste, or detect cross contamination of municipal solid waste with liquid or fine particulate substances such as sewage sludge, sawdust, crushed glass, aggregates, or fly ash. Some of the basic principles and techniques may be relevant, but are not to be followed blindly.

CHAPTER 3 **DESIGN OF A WASTE AUDIT**

The design of a waste audit must be carefully done, if the statistics resulting from the effort are to meet the requirements for accuracy and precision. This section of the manual provides practical instruction for the design of the waste audit, involving the three steps of: developing a clear statement of objective, identifying the way in which the sampling locations or types of solid waste are divided into groups (stratification, to use the technically correct term) to suit the objective, and the determination of the number and size of samples required to achieve a desired level of precision in the results. Accuracy will be dependent on the extent to which the sample is representative of the whole waste stream, called “the population” in statistical terminology.

Although some knowledge of the statistical foundations would assist the user of the manual, it is not essential for effective use of these instructions. However, if the user becomes uncertain or frustrated by the instructions, referring the manual to a statistician should yield a quick clarification. Calling for assistance will likely be related to the determination of the number of samples and sampling methods to ensure the sample is representative of “the population”, as the other steps are more intuitively understood by most people.

As indicated in Chapter 2, the design protocol stated in this manual is applicable to direct waste analysis of a municipal solid waste stream or a fraction thereof. For example, the protocol is applicable to an entire municipal solid waste stream or a separated fraction, such as the municipal solid waste residue remaining after organics and recyclables have been diverted from it. It is not applicable to composition surveys of other types of materials, such as concentrations of various components found in sludges, waste streams comprising mixtures of fine grained particles, or mixtures of hazardous materials.

3.1 Stating the Objective

The objective of a waste audit should be defined before plunging into the details of how it will be done. In the case of RRFB waste audits, the agency’s mandate “to develop and implement industry stewardship programs” suggests that data would be desired for many separate categories of material in the waste stream, as the focus will likely be on identifying specific materials which may be designated for stewardship. That requires a very fine categorization, such as was done in the 2011 waste audit.

Where objectives remain constant, it is important to keep the system of categorization for initial and future audits exactly the same, so that trending over time can be examined with confidence. If a

category needs to be more finely divided, that is certainly not a problem, provided that the category itself is divided within itself and not by creating new categories that cut across the definitions of other categories.

The RRFB requires that waste audits be conducted in a professionally designed and executed fashion, so as to maintain the quality of the data gathered over time. The data may be used for various purposes, such as identifying materials of interest as resource candidates, facilitating performance measurement (on a province-wide or regional basis), effectiveness of legislation (e.g. landfill bans), assessing best practices, refining education and awareness messaging and more.

Regardless of the intended use of the data, the primary objective of RRFB is to carry out waste audits in a professional manner which ensures the usefulness of the statistics. This manual is intended to provide directions in a standardized form to aid in achieving that objective. Personnel involved in RRFB waste audits are cautioned that casual attitudes to quality or poorly understood use of this manual will compromise that objective and will not be tolerated.

3.2 Stratification of the Sampling

Waste audits invariably involve division of the subject materials or sampling locations or sources of waste into groups or strata. For example, the 2011 RRFB waste audit called for sampling in which residential and institutional, commercial and industrial (ICI) sources of waste were to be kept as two separate groups or strata. Also, each landfill service area was to be identifiable in the data so that their statistics could be distinguished.

RRFB will continue to stratify sampling in the same manner, and to deal with more finely detailed stratification in the same manner as the categorization of materials, i.e.: by dividing the established strata into sub-strata rather than creating a new scheme of strata.

For example, the residential strata in the established scheme may be sub-stratified into urban, suburban and rural strata in the future, because they can be combined for the purpose of trending analysis focused on the original strata of “residential”. In a similar fashion, the ICI strata may be sub-stratified into multi-unit dwellings, schools, hospitals, malls, etc.

3.3 Determining the Number of Samples

The process of determining the number of samples is related directly to the objective and stratification desired in the sampling. The objective is usually to achieve an estimate of the average % composition of a certain material (or materials) in the overall waste stream which is the subject of the waste audit, together with an appreciation for the precision of the average % so calculated.

Typically, the result of a waste audit will express the % composition of a certain material in this way: “...the occurrence of textile [for example] in the stream is 10%, plus or minus 2%, said with a confidence of 95%...” In other words, assuming the sample was random, one can say with 95% confidence that the occurrence of textile in the entire waste stream is between 8% and 12%. The user of the statistics needs

to understand the precision, i.e.: the plus or minus % aspect, to fully appreciate the value of the statistic. Therefore we offer a third explanation: To say that plus or minus 2% gives a 95% confidence interval means that, given the same sample size and standard deviation, if the experiment was repeated 20 times, the confidence interval would be expected on average to contain the population mean (i.e. the true mean) 19 times.

In the same expression, if the occurrence of disposable cups in the samples taken averaged 1%, plus or minus 2%, say with 95% confidence, the statistician would say that the average in the whole waste stream could be a negative number. Given that the quantities involved cannot be negative, if a confidence interval for a population mean contains zero, then the interpretation is that the population mean is not significantly different than zero, i.e. it could be zero. In the event that many categories must be estimated, with numerous material categories expected to be less than 1%, as was the case in the 2011 waste audit, the resulting number of samples related to a high level of precision may be very large, so several trial calculations may be needed to find the optimum balance of desired precision and resources required for the waste audit.

The number of samples required is very much related to the question of the required precision of the resulting figures and the expected occurrence of the categories of interest. These instructions have been prepared by making all the calculations indicated in the statistical science protocol found in Annex A in this manual. The Precision Control Chart in the table at the end of this section will provide the number of samples to be taken, once the factors concerning precision desired and prior knowledge of the typical occurrence of the materials of interest are settled.

The following is the method of calculating the number of samples to be taken.

STEP 1 DETERMINE THE DESIRED PRECISION

The waste audit designer alone can answer the first question: how precise does one want the resulting percentage composition figures? Very often in designing waste management infrastructure or major construction generally, one is content with an estimate with a precision of plus or minus 25% for planning purposes, and so the designer may pick that as a practical goal.

The more precise the estimate must be, the more samples are required, and the number goes up by the square of the precision desired: narrowing the precision by a half, from plus or minus 20% to plus or minus 10%, for example, means that four times as many samples are needed. This section permits the user of the manual to interactively explore this aspect and should prompt the decision maker to consider the availability of resources versus the desired accuracy of the estimated composition of the material in question.

Begin the process of designing a waste audit with the decision on the required precision of the percent composition for the important components of the waste stream. It is suggested that one should start with the precision that is required for the task at hand. If the sample size, and hence resources required are beyond the budget then one has to either a) reconsider the required precision or, b) allocate more resources to the sampling.

A common precision target is plus or minus 25% (of the mean %), for the reason stated above. For example, a material showing a typical occurrence of 1% would then be estimated through sampling to be precise in the range of 0.75% to 1.25% (1% plus or minus 25% of 1%).

STEP 2 DETERMINE EXPECTED OCCURRENCE FROM PRIOR KNOWLEDGE

An important factor is that of prior knowledge about the waste stream. The sample size required to obtain a given level of precision depends on the standard deviation of the materials of interest. An estimate of expected standard deviation may be derived from previous surveys using the same categorization of materials, or from general literature. There is also a technique of making an initial estimate of the number of samples and then adjusting the number of samples up or down, as data is derived from the initial samples taken, a sort of adjustment “on the run”; this approach may be useful in some cases where prior knowledge is very scant. If there is little or no information about expected occurrences or standard deviations then the one should assume a 50% rate of occurrence, as was the case with the 2011 audit.

The 2011 waste audit project has provided ample data which will suggest the approximate occurrence (percentage composition) of materials of interest that will make future sampling more efficient.

STEP 3 CALCULATE STANDARD DEVIATION AS A PERCENTAGE OF THE MEAN

The first column in the Precision Control Chart below gives the “standard deviation expressed as a percent of the mean”. This expression relates to the variability of the sample data in a survey: the greater the standard deviation, the greater the range of the percentage compositions found in the various samples which made up the prior sampling. Data from previous surveys of similar type, ideally identical surveys by RRFB, will include a column which shows the standard deviations for the data for each of the materials, or groups of materials, in that waste audit.

Unfortunately, many waste audits by other agencies have reported only the composition means (averages) and not the statistical indicators such as confidence intervals or standard deviations; if the original data are available, one could then calculate the standard deviations and move forward with that information. Fortunately, the 2011 RRFB waste audit resulted in tables of sample means and standard deviations, and those tables should be used when estimating future sampling numbers.

Now, armed with a selected standard deviation from previous surveys or data, for the material or group of materials of interest, one calculates the “standard deviation expressed as a percent of the mean”. Say the sample mean (the average occurrence) for a material of interest (textiles) is expected to be about 5%, and the standard deviation for that material in the waste stream is 2% (from previous surveys or literature): the “standard deviation expressed as a percent of the mean” is 2% divided by 5% = 40%.

In light of the fact that the number of categories used in the 2011 waste audit project results in many materials showing occurrences of around 2%, with some higher and some lower, it would be sufficient to examine the 2011 data to determine the standard deviation of materials occurring at around 2%, and use that for practical purposes in a general waste audit where no one material is of predominating

interest. On the other hand, if there is an emphasis on a particular material, say the occurrence of glass in the waste stream, then one should use the occurrence rate and standard deviation 2011 data for that material.

STEP 4 REFER TO CHART TO SEE NUMBER OF SAMPLES NEEDED

Go now to the Precision Control Chart below. The numbers in the table opposite the left hand column are the sample sizes (number of samples) required for each case, depending on the desired precision which is read from left to right opposite each of the figures for “standard deviation expressed as a percent of the mean”. The column headings refer to the desired precision as a % of the expected sample mean.

Let us continue the example from Step 3.

Suppose a study is to be conducted to estimate the mean percent of textile material in the ICI waste stream at a landfill, and that the desired precision (the confidence interval) is not to exceed 25% of the expected sample mean. The expected mean for textiles is 5%, standard deviation is 2%, and the waste audit designer wants a precision of plus or minus 25% of that figure of 5%, i.e., between 3.75% and 6.25%. Now go to the table and find the column headed 25% in the “Desired Precision” columns, and look down that column to the row labelled 40% (remember: 2% divided by 5% = 40%) in the left hand column. The intersection of that row and column gives the figure of 13. This means that 13 samples are needed to achieve the desired precision of the occurrence of the selected material, textile.

Where the row and column figures are not exact, it may be necessary to round up or down. For example, say that a previous study conducted at the same landfill yielded a mean of 7.39% textile material, with a standard deviation of 7.59% or 103% of the mean (7.59% divided by 7.39% = 103%). Rounding this up to the nearest value in the table gives 105%, so that the required sample size is 71 samples, for a desired precision of plus or minus 25% of the sample average. This example also reveals that where earlier audits show a greater variability of the selected material’s composition amongst the samples then taken, more samples would be needed to achieve the same precision in a further audit.

Table 1: Precision Control Chart

Standard Deviation (expressed as a percent of the mean) read down	Number of Samples Required						
	Desired Precision (expressed as a % of the expected sample mean)						
	20%	25%	30%	35%	40%	45%	50%
5	3	3	3	3	3	2	2
10	4	3	3	3	3	3	3
15	5	4	4	4	3	3	3
20	7	5	5	4	4	4	3
25	9	7	6	5	4	4	4
30	12	9	7	6	5	5	4
35	15	11	8	7	6	5	5
40	18	13	10	8	7	6	5
45	22	15	12	9	8	7	6
50	27	18	14	11	9	8	7
55	32	22	16	12	10	9	8
60	38	25	18	14	12	10	9
65	44	29	21	16	13	11	9
70	50	33	24	18	15	12	11
75	57	38	27	21	16	14	12
80	64	42	30	23	18	15	13
85	72	47	34	26	20	17	14
90	81	53	38	28	22	18	15
95	90	58	41	31	25	20	17
100	99	64	46	34	27	22	18
105	109	71	50	38	29	24	20
110	119	77	55	41	32	26	22
115	130	84	59	44	35	28	23
120	141	91	64	48	38	30	25
125	153	99	70	52	40	33	27

CHAPTER 4 **PROCEDURES FOR CONDUCT OF WASTE AUDITS**

The standard procedure for the conduct of a waste audit falls into a planning phase and an operational phase. In the former, logistics, resources and timing are developed ready for implementation, and in the latter, the specific procedures to follow during the sampling, sorting, weighing and data recording are carried out.

4.1 Planning for a Waste Audit

Once the waste audit design has been completed, i.e.: concerning number, size and types of samples to be taken, sampling method to ensure randomness, locations, timing of collection, categorization of materials, and any special considerations related to the purpose of the audit, planning of the work can commence.

Planning of a waste audit must address at least the following factors:

- .1 understanding the design of the waste audit, as noted above.
- .2 scheduling of sampling.
- .3 logistics for vehicles, equipment, tools, and work flow.
- .4 space requirements for sorting.
- .5 personnel resources.
- .6 occupational health and safety.
- .7 public contact and relations.

Each of these points is detailed below, in the form of instructions. At the completion of the planning phase, operational instructions are to be detailed in the Field Procedures Manual which is customized for each waste audit (see Section 4.2).

4.1.1 *Understanding Waste Audit Design*

Review the design of the waste audit with the person(s) who produced it. It is very important to understand the waste audit objectives and all assumptions made about availability of resources, cooperation of waste sampling point operators, the desired time frame, and any sensitive factors which must be understood by field personnel. Identify any assumptions which are critical to the successful

execution of the work in the field, and take steps with the designer to secure assurance that any dubious assumptions are sound.

For example, a waste audit may be desired to characterize materials arriving at a privately operated material recovery facility, so a critical assumption would obviously be that the owner/operator will be cooperative and that sampling sites will be made accessible to audit personnel and equipment. In this example, should it be evident that the waste audit designer has not verified the cooperation of the site owner/operator, it would be critical to make contact with that party to confirm this; if it becomes evident that such cooperation is not forthcoming, it would be premature to start the planning process until the matter is successfully resolved.

4.1.2 Sampling Schedule

Develop a preliminary schedule based on the waste audit design requirements for numbers and spacing of samples. Space out the sampling over the time frame and locations involved, so as to achieve as great a scattering of times and locations as possible. Try to cover equally all times of day, days of the week, truck types, and origins of loads, as much as possible.

With the preliminary schedule in hand, interview all of the sampling point site operators to secure information on the nature of their incoming traffic as it relates to the objective of the waste audit, i.e.: operating hours and dates of the site, typical times of arrival of the vehicles to be sampled, consideration of the types of vehicles of interest, if this is a factor, and the operator's ability to identify the origin of the materials brought to the sampling point. All of the relevant information must be compiled in a very detailed form, as the next step is to develop a final schedule which minimizes the chance of disruption due to unforeseen events during the work.

The final schedule in draft form should be distributed to sampling site operators for careful review and comment, to extract any last-minute useful observations that may suggest further revision. The final schedule should then be adopted and followed faithfully.

4.1.3 Logistics

Determine requirements for vehicles, equipment, tools, and contingency plans for collection and movement of samples. This involves extremely detailed and careful estimating of needs, including working through expected time-motion cycles. Allowances for contingencies of material and time must be included, such that the waste audit process is not crippled due to an unlikely but foreseeable event such as mechanical breakdown of the collection truck, for example.

4.1.4 Space and Equipment Requirements

Locate and equip a sheltered place for the receiving, temporary storage, sorting, and eventual dispatch of samples. The space must be dry and sheltered from wind and precipitation. Suitable space would be warm enough to enable sorting to be carried out without excessive time required for personnel to periodically retreat to warming stations. The winter months can be challenging in this regard, and it

must be understood that extreme cold will not only induce inefficient use of labour but also impair the quality of the survey results. Conversely, extremely warm workplaces can be just as debilitating. If localized workplace conditions require it, forced ventilation can usually alleviate workers from heat stress.

Since the process requires temporary storage of samples, there will be minor occurrence of odours and attraction of vermin (rodents and flies). Building occupancy and municipal planning regulations must be checked to ensure that the proposed use of a building for this purpose is permitted. Regulatory expectations concerning impact of activities on other building occupants, fire safety, vehicle traffic, odour control, vermin control and containment of materials may be challenging and must not be left to last-minute resolution.

Hypothetically, the sorting of samples could take place in a truck body or tent. Consideration of the suitability and sufficiency of such spaces must be very carefully reviewed, as these workspaces represent potentially unsatisfactory spaces for the waste audit, due to small sizes, potential escape or wetting of materials in windy or wet conditions, and uncontrollable cold or hot environments.

The space must be fitted out with a number of bunkers each of about three cubic metres in volume, suitable in number to provide temporary storage of a number of samples. Bunker walls can be made of plywood or similar panels, arranged such that loading and unloading is convenient.

Equipment required is listed in the generic Field Procedures Manual attached as Annex B. The arrangement of racks to hold bags must be adapted to the layout of the space, but in any case the bag stations and buckets must be clearly labelled as to materials, to facilitate proper deposit of materials in them. Example photographs of these features are included in the Field Procedures Manual attached as Annex B.

4.1.5 Personnel Resources

Determine the human resources needed, and the requirements for training.

The work involved in a waste audit requires personnel for project management, vehicle operation, material handling, sorting, weighing, data recording, statistical analysis and reporting. All of those duties demand trainable personnel with responsible, mature attitudes toward the tasks. Some of the tasks are inherently disagreeable, especially those involving direct handling and sorting of the waste materials.

Project managers and those responsible for statistical analysis require the skills and experiences of professionals in those fields. Technically trained and reliable personnel are needed for vehicle operation and the weighing and data recording functions. Material handling and sorting requires personnel with reliable work habits, good overall health and fitness, and ability to work continuously while standing and stooping to lift. All must be capable of training and being observant of workplace health and safety protocols.

The labour required for sorting into the number of categories indicated in Appendix C can be estimated as one sample sorted per work day per sorter. That factor assumes full work days, positively motivated workers, prior training (including use of personal protective equipment and emergency procedures), proper work space and equipment, and close supervision.

Training is straightforward and is best accomplished on the job. Familiarization with the detailed categorization is essential, and this involves repetition and supervisory feedback on quality of sorting; initially, productivity will be low, but within a very few days, diligent workers will master the categorization scheme such that the need for reference to charts becomes less frequent. Training must also address the purpose of the waste audit, workplace administrative protocols, use of fire extinguishers and emergency procedures, WHMIS, health and safety, public communications and media relations, and emphatically encourage suggestions for improvement of current work and future audits.

4.1.6 Occupational Health and Safety

Determine the occupational health and safety measures involved in the various workplaces in which personnel will be active, understanding that waste audit personnel must observe the requirements of the operators of places they are to visit as well as those related to highway transportation and the workplaces under their own employer's management, such as the sorting station.

This involves close attention to detail, by knowledgeable personnel. Operators of all sites to be sampled must be contacted early in the planning process, so that any unusual requirements can be determined early enough for correct steps to be taken before work commences.

Supervisors must ensure workers wear personal protective equipment, observe safe work procedures, and must be vigilant to achieve compliance. Safety must be taught and reinforced by supervisors, through formal instruction on the job, monitoring, and leading by example. Prompt corrective and disciplinary action if needed must be taken where non-compliance is observed.

4.1.7 Public Contact and Relations

Define the behaviour expected of workers when they are in contact with the public. Some of the work in a waste audit takes place in places frequented by the public, such as at landfill tipping faces. All personnel may be subjected to naturally curious inquiries from the public, and must be able to respond appropriately. The general topic of environmental conditions and the actions of government sometimes involves sensitive matters. Suitable protocols and training of personnel in all positions involved with the waste audit are essential.

4.2 Operation of a Waste Audit

Once the operation of a waste audit has been planned, produce a Field Procedures Manual customized for the specific audit.

A generic Field Procedures Manual has been produced and is found in Annex B to this Waste Audit Manual. It has been written in anticipation of the conditions expected to be encountered in any waste audit commissioned by the RRFB. It must be reviewed and revised carefully as each waste audit is commissioned, to bring it up to date and to modify or add any points which are needed to suit the audit.

At the conclusion of every waste audit, a careful review of the generic Field Procedures Manual should be conducted, with a view to revisions.

ANNEX A

Exposition of Statistical Science Concerning Design of Number of Samples

Computing 95% Confidence Intervals and the Margin of Error ME₉₅

(a) 95% Confidence Interval as a Measure of Precision

Suppose x_1, \dots, x_n is a set of n measurements of percent composition for a given component of the waste stream. The sample mean, which provides an estimate of the true mean percent composition for that component, is computed as follows:

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i \quad (1)$$

The sample standard deviation $SD(x)$ is computed as:

$$SD(x) = \sqrt{\frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})^2} \quad (2)$$

Statistical theory tells us \bar{x} that the follows a student's t-distribution, with a mean value equal to the true mean composition, and a standard deviation that is approximated by $SD(x)/\sqrt{n}$. It is this standard deviation that determines the precision (for an explanation of "precision" and the difference to "accuracy" see (c), below) of as an estimate for true mean percent composition. The standard way to express this precision is in the form of a 95% margin of error ME₉₅:

$$ME_{95} = t_{95}^n \frac{SD(x)}{\sqrt{n}} \quad (3)$$

A mean value is correctly reported as $\bar{x} \pm ME_{95}$. For example, at a landfill, the mean percent organic material from $n = 6$ random samples of residential waste was $\bar{x} = 32.69\%$, with a standard deviation of $SD(x) = 10.36\%$. The 95% margin of error is computed as:

$$ME_{95} = t_{95}^6 \frac{SD(x)}{\sqrt{6}} = 2.571 \frac{10.36}{\sqrt{6}} = 10.87\% \quad (4)$$

The value for $t_{95}^6 = 2.571$ was obtained from Table 1 by looking up the value corresponding to a sample size of $n = 6$. The sample mean is reported as $\bar{x} = 32.69\% \pm 10.87\%$. The interval $(\bar{x} - ME_{95}, \bar{x} + ME_{95}) = (21.82\%, 43.56\%)$ is called a 95% confidence interval, and any number inside this interval is a plausible value for the true mean percent organic material for that landfill.

(b) Using sample Size to Control Precision

An inspection of equation (3) shows that the width of a 95% confidence interval $(\bar{x} - ME_{95}, \bar{x} + ME_{95})$ is controlled by the sample size, all else being equal. Often in management situations, estimates of

population means are acceptable only if they are reported to a certain degree of precision, as determined by specifying the maximum acceptable margin of error ME_{95} . Equation (3) can be used to determine the minimum sample size required to ensure that the margin error is no larger than the specified value. This can be done using software to find the smallest value for n such that:

$$\frac{ME_{95}}{SD(x)} - \frac{t_{\alpha 95}^n}{\sqrt{n}} \geq 0 \quad (4)$$

The precision control chart in Section 3.0 was computed using equation (4), with ME_{95} and $SD(x)$ expressed as a percentage of the mean percent composition.

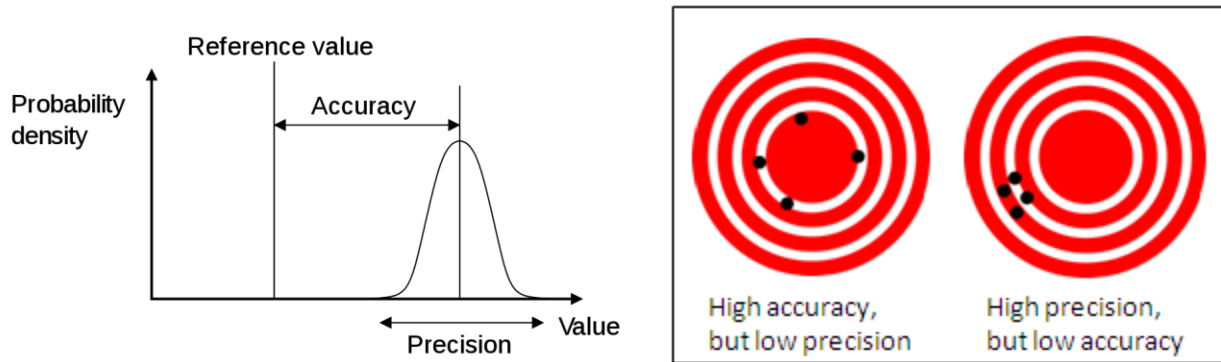
Table 1: Values for t_{95}^n Used to Compute ME_{95}

n	t_{95}^n	n	t_{95}^n	n	t_{95}^n	n	t_{95}^n
		26	2.0595	51	2.0086	76	1.9921
2	12.7062	27	2.0555	52	2.0076	77	1.9917
3	4.3027	28	2.0518	53	2.0066	78	1.9913
4	3.1824	29	2.0484	54	2.0057	79	1.9908
5	2.7764	30	2.0452	55	2.0049	80	1.9905
6	2.5706	31	2.0423	56	2.0040	81	1.9901
7	2.4469	32	2.0395	57	2.0032	82	1.9897
8	2.3646	33	2.0369	58	2.0025	83	1.9893
9	2.3060	34	2.0345	59	2.0017	84	1.9890
10	2.2622	35	2.0322	60	2.0010	85	1.9886
11	2.2281	36	2.0301	61	2.0003	86	1.9883
12	2.2010	37	2.0281	62	1.9996	87	1.9879
13	2.1788	38	2.0262	63	1.9990	88	1.9876
14	2.1604	39	2.0244	64	1.9983	89	1.9873
15	2.1448	40	2.0227	65	1.9977	90	1.9870
16	2.1314	41	2.0211	66	1.9971	91	1.9867
17	2.1199	42	2.0195	67	1.9966	92	1.9864
18	2.1098	43	2.0181	68	1.9960	93	1.9861
19	2.1009	44	2.0167	69	1.9955	94	1.9858
20	2.0930	45	2.0154	70	1.9949	95	1.9855
21	2.0860	46	2.0141	71	1.9944	96	1.9853
22	2.0796	47	2.0129	72	1.9939	97	1.9850
23	2.0739	48	2.0117	73	1.9935	98	1.9847
24	2.0687	49	2.0106	74	1.9930	99	1.9845
25	2.0639	50	2.0096	75	1.9925	100	1.9842

(c) Accuracy and Precision (from Wikipedia on October 19, 2011)

In the fields of science, engineering, industry and statistics, the accuracy of a measurement system is the degree of closeness of measurements of a quantity to that quantity's actual (true) value. The precision of a measurement system, also called reproducibility or repeatability, is the degree to which repeated measurements under unchanged conditions show the same results. Although the two words reproducibility and repeatability can be synonymous in colloquial use, they are deliberately contrasted in the context of the scientific method.

A measurement system can be accurate but not precise, precise but not accurate, neither, or both. For example, if an experiment contains a systematic error, then increasing the sample size generally increases precision but does not improve accuracy. The end result would be a consistent yet inaccurate string of results from the flawed experiment. Eliminating the systematic error improves accuracy but does not change precision.



Accuracy indicates proximity of measurement results to the true value, precision refers to the repeatability or reproducibility of the measurement.

ANNEX B

Generic Field Procedures Manual

Field Procedures Manual

Generic Document to be Edited for Any Waste Audit to be Commissioned

Cover page format to be as per RRFB instructions.

Boxes such as this one provide instructions for editing.

Waste Audit

Insert name and date of waste audit project

**To Be Conducted for Resource Recovery Fund Board, Inc.
Nova Scotia**

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CHAPTER 1 INTRODUCTION

This section must be carefully edited to indicate the name and purpose of the waste audit and the names and roles of the parties. For the purpose of this generic document, personnel positions are named as shown, and these may be modified to suit the personnel structure for a specific waste audit.

This document provides a Field Procedures Manual to guide and control the field work by personnel involved in retrieving and characterizing the solid waste samples related to the project “Waste Audit for [XXXXXX] during the period of [YYYY]. As such, this is an “internal” document for the instruction and control of project personnel.

The work to be carried out comprises the characterization of solid waste materials being disposed at [name the sites] in Nova Scotia. This Field Procedures Manual includes essential administrative procedures and protocols, health and safety guidelines, sorting instructions and operating procedures, for conducting the waste audit at the facilities from which samples of solid waste will be taken for analysis. It also includes instructions concerning communications and media relations as well as “sustainability” considerations and RRFB’s expectations inherent in the work.

The objective of “characterization” (also known as the “waste audit”) is to establish the proportions by weight of various categories of waste being disposed at the designated sites. The sources of and the categories of waste into which solid waste samples will be sorted have been prescribed by the RRFB. Samples will be taken from loads of municipal solid waste arriving at disposal points from designated sources. Often those sources will be identified as residential sources and institutional, industrial and commercial (ICI) sources separately, and when such is the case, these samples will be analyzed separately.

In general terms, the methods prescribed in this Field Procedures Manual will fully realize the potential for a small number of samples of waste, taken from a pre-determined number of vehicles selected at random at each prescribed disposal site, to represent the composition of the entire waste stream with a known statistical accuracy.

CHAPTER 2 FIELD PROCEDURES

2.1 Resources and Organization of Logistics

This generic document assumes the trucking of samples to a central sorting station. Edit carefully if this is not the case.

The following summarizes the human and other resources and the organization of personnel and logistics assigned to conduct the work:

1. The field team will consist of a Sampling Technician and if required, one or more subordinate Sorters. The Sampling Technician is in charge of the field work. He or she reports to the Project Manager for the project.

In the event that the waste audit project involves a more complex organization of workers, supervisors and lines of accountability, an organization chart should be inserted here.

2. The Sampling Technician will travel to the sampling sites to retrieve samples, ensure proper sorting, weighing and recording of data at a central sorting station, train and supervise the Sorter(s), ensure the proper disposal of sampled materials after the sorting and weighing is completed, and be the principal liaison with others concerned with the field work. The Sorter(s) will work only at the sorting station, sorting samples into required categories and assisting the Sampling Technician in every aspect of his or her work.
3. The retrieval of samples will be carried out on a systematic schedule, attached as Appendix A. The samples will be retrieved using a rented, compartmentalized, covered truck. The Sampling Technician will drive the truck to the designated sites to retrieve samples, and truck them to the sorting station.
4. The samples will be sorted at a sorting station located in a secure industrial building rented for the purpose. The building incorporates the sorting area itself, which is separated from other building uses. This space provides a well-lit, warm, comfortable work environment which will enable a thorough, accurate sorting of materials into the desired categories. The building has a full service washroom, lunch space, and a separate, secure room where street

clothing may be changed for work wear at the beginning and end of shifts. Suitable tables and materials handling and weighing equipment will be installed in the sorting station.

5. The hours of operation at the sorting station will be 8:00 a.m. until 5:00 p.m. Mondays through Fridays, during which time periods the designated loads will be sorted, weighed and recorded. Extension beyond 5:00 p.m. may be required to maintain the desired production rate.
6. Operation of the truck for collecting samples will involve varying hours away from the sorting station, according to the proximity of the sampling sites.
7. Suitable personal protective clothing and first response devices will be used. The employer will pay for all equipment and other matters involved in logistics and occupational health and safety provisions, other than workers' ordinary industrial clothing and footwear.
8. Equipment required includes the following:
 - Occupational health and safety items to use at the sorting station and in the field and on vehicles:
 - Gloves, puncture and moisture resistant, with latex inner gloves if personnel desire for comfort
 - Chemical goggles or safety glasses with splash shields
 - Soft or hard hat (soft hat as a minimum for sanitary reasons, or hard hat if required at sampling locations or if there are overhead hazards in the sorting station)
 - N-95 dust mask
 - Disposable Tyvek overalls, to be disposed when soiled or torn
 - CSA approved steel-toed, steel-shank boots (low rise are acceptable at the sorting station, but personnel involved in sampling in the field must wear middle or high rise boots)
 - Reflective safety vests for field personnel collecting samples, and at the sorting station if other activities in the workplace include movement of trucks indoors in the vicinity of the sorting activity
 - Hand sanitizers
 - Portable eye wash
 - 10 pound ABC fire extinguisher
 - Industrial #1 or higher rated first aid kit
 - Washroom supplies
 - Potable water supply
 - Cellular telephone and charger
 - Scales:
 - On the truck in the field to weigh samples being collected: an industrial spring balance, manually zeroed, capable of loading 25 kilograms, graduated at 250 gram intervals

- In the sorting station, for heavier weights: a floor level electronic platform scale, with indicator stand, capable of loading up to 200 kilograms, precision plus or minus 0.1%
- In the sorting station, for lighter weights: a tabletop electronic platform scale, capable of loading up to 5 kilograms, precision plus or minus 1 gram.

- Material handling on the truck:
 - Plywood or tarp dividers used to prevent samples from mingling
 - A jury-rigged boom with rope and pulley to enable lifting of portions of samples in a small tarp or in bags
 - Tarp with corner grommets or drawstrings, about 2 by 2 metres, to hold portions of samples while weighing during collecting
 - Flat scoop shovel and broom

- In the sorting station:
 - Bunkers to hold samples pending sorting, constructed of sturdy material, each approx. 2 cubic metres capacity, number corresponding to the time-motion cycle calculated for the audit
 - Sturdy tables for sorting small items, approx 600 mm by 2 metres, each 2, per pair or sorting personnel
 - Wall mounted chart clearly legible, showing full detail of categorization
 - Small magnet, to distinguish ferrous from non-ferrous metal items
 - Rakes and brooms, with dustpans
 - Clipboards and supply of pens, stapler, and forms
 - Labels for bag racks
 - 40 litre approx. clear plastic bags for containing light items while sorting, disposed with sample, estimate 200 per sample
 - 10 litre approx plastic buckets for containing heavier items while sorting, estimate 10, re-useable

The arrangement during the 2011 waste audit, of bag racks and the sorting table in use as well as the wall chart and a person wearing PPE, is shown in the following photographs:





2.2 Coordination with Waste Disposal Site Operators

The RRFB will provide explanatory correspondence to site operators explaining the purpose and method of the waste audit, and the Project Manager will follow up to review arrangements in more detail. Generic texts are attached in Appendix B.

Several days prior to the scheduled visit to a site where samples are to be taken, the Project Manager is to contact the site operator, using the contact information developed during the planning phase at the outset of the project. The purpose of the call will be to advise the date and coordinate the taking of the samples on that visit. The following will be achieved:

1. The procedure to be followed during the visit will be reviewed with the operator, in particular to determine the optimum range of times which would best suit the purpose of the sample selection protocol. Any special considerations should be discussed, such that when the Sampling Technician arrives on site, the sampling event should not be disruptive or chaotic. The procedure which will be followed to select the load to be sampled will be indicated, i.e.: a process that is in the control of the Sampling Technician.
2. The Project Manager will confer with the disposal site operators to determine the typical pattern of haulage exhibited by their customer haulers. It is expected that there will be some differences between the typical haulage schedules and frequencies of those collectors serving residential sources versus those serving ICI, and differences in vehicle type, such as large compactor truck versus small straight truck, trucks serving entirely residential routes versus those involved in mixed residential-ICI loads, and commercial dumpster versus bag pickup styles.
3. With knowledge of the patterns and types of collection occurring at each site, the Project Manager will dispatch the collection truck at a suitable time of day for the collection of the planned samples. Cautions with respect to adverse driving conditions are to be taken.

4. The site operator will be provided with the Sampling Technician's cell phone number, to use for any further coordination of effort between them.

2.3 Collecting and Disposing of Samples

The following procedure describes the conduct of the work in collecting and disposing samples:

1. Generally, the first task when the truck arrives at the sampling site is to offload the previously sorted sample(s), if any are on the truck. It has been arranged that tipping fees will not be charged, as each sampling point eventually gains as much as it loses in the sampling and disposal process, give or take a small amount. The materials on board will have been separated into recyclable and residue. The directions of site staff will be followed concerning the disposal of the spent samples.
2. The Sampling Technician will complete the relevant part of the Sample Movement Control Form attached as Appendix C. That form records the origin of the sample, and tracks it from point of origin to disposal of materials after sorting and data recording. Once the Sample Movement Control Form has been completed in all parts, it will be given to the Project Manager.
3. Once on site and looking for a particular type of vehicle, if relevant, the Sampling Technician will randomly pick the vehicle in advance of vehicle arrivals, using a random number generator. Where vehicle traffic is sparse at the sampling site, arrangements will be made with the site operator to set aside a suitable sample in advance. The selected vehicle will be directed to one side to offload its entire load at a safe spot negotiated with the site operator. The vehicle type will be noted and its weight (with payload and tare) will be recorded at those sites with motor vehicle scales (where no scaling is possible, an estimate of weight or volume will be made).
4. The load will then be mixed with a backhoe or loader, if available, so as to achieve a good degree of homogenization. Unusually large or bulky items will not be selected, but a note on the Sample Movement Control Form should be made to indicate their nature, such as furniture, machinery, telephone pole, or billboard. A sample of the desired weight will be then scooped by hand or machine from the pile at about 20 random points throughout the load, so as to extract a minimum of 135 kilograms for residential and 200 kilograms for ICI samples. Each scooping of about 7 to 10 kilograms each should encompass all the materials in the immediate vicinity of the spot selected.
5. Sample components will be bagged and weighed with a hand-held spring balance on the spot to ensure that the target sample weight is achieved. Large or loose items not conveniently fitting in a garbage bag will be tied or netted so that the spring balance hook can lift them. The spring balance is to be fitted with an automatic weight recorder which enables one to lift the load slowly until it hangs free, and then set it down without having to read the gauge

while the load is suspended. This device will be used only to ensure that the minimum sample weight has been achieved.

6. The sample will be loaded into one of the collection truck's separate compartments. The Sampling Technician will enter the truck compartment location and sample type and weight on the Sample Movement Control Form, as each sample is loaded.
7. The site operator will be informed when the Sampling Technician is ready to leave the site, and will be thanked for such assistance as was rendered. The samples will be trucked to the sorting station.

2.4 Sample Management and Data Recording

The procedure for managing the movement of samples in transit and categorizing waste at the sorting station will be as follows:

1. The samples arriving on the truck will be offloaded and placed into holding bins or bunkers in the sorting station. The identity data for each sample (site of origin, sector-residential or ICI, serial number, date of sampling) is to be immediately marked on a placard at the holding bin. The date and time of transfer to the holding bin is to be recorded on the Sample Movement Control Form.
2. The sorted materials from the preceding samples will then be loaded on the truck, separated as recyclable and residue. If circumstances dictate, the sorted samples may be moved at any other time.
3. Using the containers and plastic bags provided, the Sampling Technician and Sorter will commence separating the waste, one sample at a time, into the required categories as prescribed on the Sample Data Recording Form found at Appendix D. In general, heavy or voluminous items will be separated first and placed into their designated containers. Rakes, brooms, hand magnets (to identify ferrous vs. non-ferrous metals) and scoops will be used as needed.
4. When a container or bag has been filled it will be weighed on the appropriate platform scale and the weight will be recorded on the Sample Data Recording Form, for the relevant category. The category number will be written on the bag or container or item. When the Sorter weighs and records data, the Sampling Technician shall periodically check the accuracy of his or her work.
5. Most materials will be left in the bags for onward transport, and heavier material such as organic waste may be held and transported in green carts, at the discretion of the Sampling Technician.

6. Correction for excessive moisture content will be required if the materials collected are unusually wet due to rain or snow melt or cross contamination from other wet waste. In such cases, moisture contents can be determined by conventional materials laboratory analysis, and the constituent weights in such cases will be adjusted to the moisture content norms. If it is more convenient, this may also be accomplished by drying the wet materials in ambient air in the sorting station and weighing them when they have returned to ambient conditions. Special care must be taken in these cases to identify these items by carefully tagging them, so that their weights can be added later to the correct sample's Sample Data Recording Form. Their original wet weight is not to be recorded, but the Sample Data Recording Form is to be annotated to indicate that there is some material to be weighed and added later. Since wet cardboard and papers are treated as a specific category under the "organics" group, this procedure will not be applied to those categories—wet cardboard and paper will be weighed as found, and their weights recorded in their wet form.
7. This process will be continued until the entire sample has been divided into the required categories and each category has been weighed and the data recorded. These categories are very detailed, and the full sample must be sorted and weighed, including the remaining unidentifiable waste. The highest priority shall be given to a thorough sorting of the material, as the many categories involved each represent only small proportions of the overall sample, and accuracy is the primary objective.
8. Sorting of the next sample will not be started until all of the previous sample has been processed and the waste moved away from other samples. Before beginning to sort the next sample, the floor and tables must be swept well clean of any remaining materials which would otherwise affect the data collected for the next sample.
9. Any municipal hazardous and special waste (MHSW) shall be bagged and identified as to site of origin, and held in a secure place in the building until it can be dispatched to its site of origin.
10. Once a sample has been processed, it will be temporarily held until it is convenient to load and truck it to the next site of call. The materials will be kept segregated in the truck in recyclable and residue categories. For sanitary reasons, putrescible organics in green carts may be disposed ahead of schedule at a local organics receiving point rather than being held and taken on to the next site of call.
11. The Sampling Technician will take custody of the completed Sample Data Recording Forms and the Sample Movement Control Forms and guard them very carefully, and periodically give them to the Project Manager, who will without delay copy them and convey copies or images to the data recording personnel.

2.5 Occupational Health and Safety

The following lists some common hazards that may occur during a physical handling or transportation of solid waste:

- Cuts and punctures from handling broken or hazardous materials such as broken glass, razor blades, bottles of unknown/unlabeled substances and other hazardous materials.
- Back injury from lifting heavy loads.
- Slipping and falling.
- Heat or cold stress and fatigue.
- Noise exposure from operation of heavy equipment.
- Animal and/or insect bites.
- Airborne contaminants, dust from solid waste.
- Chemical hazards, liquid spills from containers, household hazardous chemicals.
- Biological hazards, medical wastes and sharps.
- Harassment or intrusion by people intent on theft or personal injury to workers.

It is inherent in the waste management industry that solid waste contains a very wide variety of materials in uncertain proportions, and thus it is not possible to prepare or rely on documentation in the nature of MSDS forms found in many industries. Safety procedures typically recommended for the physical sorting of solid waste are to be followed carefully, including the following:

- All waste sorting personnel should be in good physical condition, have had a recent medical exam, be encouraged to carefully consider taking applicable inoculations, not be sensitive to odours and dust, and be able to read warning signs/labels on waste containers.
- There will be absolutely no eating, smoking, or drinking during sorting activities. Food and liquids are to be kept away from the sorting area.
- Hands and faces should be washed before eating or drinking.
- Personnel must always wear and/or use the PPE specified in Section 2.1.
- Personnel collecting samples at sampling sites will observe any additional requirements for PPE or procedures applicable at those sites.
- Personnel are not to open containers in an attempt to identify unknown chemical substances present in the waste stream: vials of chemicals, unlabeled pesticide/herbicide containers, and substances (e.g., chemicals, or needles) in unlabeled plastic/glass bottles/jugs. In those cases, when in doubt, treat these as household hazardous waste and place in tied bags and label as municipal hazardous and special waste (MHSW).
- If bio-hazardous wastes, such as hospital dressings, medical blood bags and tubing, and syringes, are detected, personnel are to proceed very carefully in handling them. Treat these as MHSW and place in tied bags and label as MHSW. Then, dispose of gloves, overalls, soft hats and other items which may be contaminated with these substances and bag them for disposal as MHSW. Wash hands and any other hard surfaced items such as hard hats and the surfaces of floors, tables, and truck bed.

- When sorting glass, it is good practice to remove the large pieces first, and then remove the smaller shards. Use a rake or shovel to pull/push the material near the glass location and carefully continue sorting.
- Personnel are to frequently use hand sanitizers and to always wash hands and face before eating and after washroom use. Personnel involved in handling waste are to leave footwear and PPE at the building or in the truck, although those who want to take their footwear off site may do so but must then thoroughly clean them first.
- The Sorter(s) will receive hands-on training by the Sampling Technician, on the first day of the sorting program. Health and safety will form a significant part of the training curriculum, and then at least four sample loads will be sorted by trainer and trainee personnel working together, so that the sorting routine and health and safety practices will become familiar and uniform.
- Personnel at the sorting station and in field work will carry a cell phone to enable calling should a medical or other emergency arise. Personnel in all locations should try to learn about the proximity to medical, police or fire services and the response times which should be expected.

RRFB places a high priority on workplace health and safety, and will endeavour to provide suitably equipped and operated workplaces and to protect workers through training and encouragement of safe practices. Workers are to be reminded of their right to refuse to carry out work which they apprehend to be unsafe, and the process for resolution of such matters.

CHAPTER 3 COMMUNICATIONS AND MEDIA RELATIONS

<p>This section should include a description of any sensitive issues which apply to the waste audit.</p>
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The waste audit will be of interest to people who become aware of it through a variety of means. Solid waste management is a matter of direct responsibility and jurisdiction of both the provincial and municipal governments, and there are numerous parties involved or interested, such as elected officials, regional coordinators, waste management services contractors, municipal waste management staff, public interest groups, and the general public.

While the waste audit process itself is straightforward and its purpose should be readily understood and seen as a legitimate activity by most people, project staff are to be made aware that solid waste management is often a sensitive topic, and for that reason is sometimes of considerable interest to the media and others.

While there should be nothing inherently controversial about the idea of conducting waste audits, project staff must be prepared to deal directly with persons with whom they may be in contact with during the course of their duties. The purpose of including this section in this Manual is to prepare and equip field staff to deal with dialogue which may range from pleasant inquiries and suggestions, to hostile criticism of their work and the role of government in waste management in its broadest sense.

All people with whom the field staff may be in contact have a rightful expectation to be received with courtesy and respect, and field staff should be able to respond directly to some questions or suggestions. The protocol will be as follows:

1. The Sorter(s), working at the sorting station, is not likely to be in direct contact with interested parties. However, if this occurs, the Sorter should simply explain that he or she is involved in a waste audit for a provincial government agency, for the purpose of gathering data on the composition of solid waste produced in various areas of Nova Scotia. Further inquiries are to be directed to the Sampling Technician or the Project Manager. The Sorter will know the Sampling Technician's cell phone number and will also be supplied with a supply of the Project Manager's business cards to assist in this.

2. Inquiries to the Sampling Technician are more likely to be made as compared to a Sorter, as he or she is in frequent direct contact with solid waste management staff including regional offices, municipalities, site operators, and haulers. He or she should freely explain the above point, including the intended use of the data now being gathered, ie: for research purposes, to help in designing more effective or efficient recycling programs and the like. Further inquiries are to be directed to the Project Manager. The Sampling Technician will also be supplied with a supply of the Project Manager's business cards to assist in this.
3. The Project Manager may elaborate on the above noted information points, but not to the extent of commenting on policy or predictions concerning Nova Scotia's evolving waste management programs or infrastructure. Such matters will be referred by the Project Manager to designated officials at RRFB.
4. Brief notes are to be made following any significant contact. It is not necessary to identify any inquiring party, though introductions are sometimes appropriate, in which case a note may be made in that regard.

CHAPTER 4 “SUSTAINABILITY” PROTOCOL

This section should be edited to provide specific information related to the waste audit.

RRFB is committed to environmental and social sustainability in business practices, as an important part of their sense of corporate social responsibility.

In the conduct of this project, it is important to recognize RRFB’s objectives related to “sustainability” considerations, as follows:

1. All of the consumable goods and services needed should be procured in Nova Scotia, wherever possible.
2. All of the project personnel should be resident Nova Scotians, as their incomes and expenditures remain mostly local.
3. The Sampling Technician should have technical training at the technician or junior engineer level, and the professional experience gained by that person will accrue to meeting the requirements for professional certification, representing an advancement in experience and credentials of Nova Scotia professionals.
4. The smallest (yet capable), most fuel-efficient vehicle for sample collection should be selected, and be operated on the most efficient routes possible.
5. Upon completion of the sorting of each sample, recyclable materials will be kept separate from the residue which must go to landfills, and the recyclables will be properly disposed as such.
6. Reusable materials will be procured, such as bags and protective clothing, as much as is compatible with survey integrity and health and safety considerations.
7. Rental rather than purchase of as many items as possible will be practiced.

8. The occupational health and safety of personnel will be given an extremely high priority, by properly equipping and training them, and supporting them in the proper use of personal protective equipment and work practices.
9. Business travel for meetings and logistics will be avoided, preferring to use teleconferences and email.
10. Personnel will minimize the use of paper in copying, always preferring to copy both-sides and minimizing the volume of paper consumption in offices in favour of electronic records and documents.
11. Personnel will strive to develop and continue ingrained habits of efficiency in the use of buildings, materials, and transportation.

All actions taken by personnel during the project will be weighed against this protocol, recognizing that the protocol endeavours to fulfil serious corporate social responsibility objectives.

APPENDIX A

Sampling Schedule

Provide a schedule in the following or similar form for clarity. Indicate statutory or civic holidays to remind personnel of their occurrence.

RRFB Waste Audit Schedule

Week	Date Range (Monday – Friday)	Monday	Tuesday	Wednesday	Thursday	Friday
1						
2						
3						
4						

APPENDIX B
Generic Texts of Communications with Site
Operators

INITIAL COMMUNICATION FROM RRFB TO SITE OPERATORS NOTIFYING RRFB PLAN TO CONDUCT WASTE AUDIT

Communication in the form of email or hard copy.

From: RRFB official

To: Facility Managers/Operators mailing list

Subject: RRFB Nova Scotia Launches Waste Audits Project

Importance: High

Please be advised that RRFB Nova Scotia has contracted the consulting firm of

Insert name of firm or indicate audit to be done by own forces

to conduct a series of comprehensive, province-wide waste audits commencing

Insert time frame and any special information on geographic scope, for example "ICI sources only, from regions x, y and z", as the case may be.

This initiative will provide solid baseline data that will assist RRFB and its partners - the seven solid waste-resource management regions, municipalities and Nova Scotia Environment – in pursuing stewardship initiatives to divert additional materials from landfill and help Nova Scotians meet the legislated disposal rate of 300 kilograms per person per year by 2015. Further, these audit results will guide RRFB investment in further research and development, programs and education/awareness.

RRFB respectfully requests your cooperation and assistance to ensure the success of this project.

A representative from

Insert name and affiliation of the contact person who will be following up as indicated.

will be contacting you within the next few days to familiarize you with the project team, its role and outline the information and on-site assistance needs of the project team. Once they have been familiarized with your scheduling and typical waste receiving patterns, they will coordinate with you a mutually convenient schedule for segregating audit samples, arranging transfer of samples to and from their sorting facility, etc. Here their contact information for your reference:

Insert detailed contact names and information for the designated contact.

Any confidential information disclosed to or obtained by them while conducting waste audit services for RRFB shall be treated in a manner consistent with the confidentiality policies of RRFB. Further, RRFB gives its assurance that assessing compliance with or enforcement of provincial regulations is not a component of this project - audits are being conducted to provide RRFB and its partners with baseline information only for purposes identified above.

Edit the preceding paragraph very carefully to specify the purpose of the waste audit. The purpose could in future include audit for regulatory compliance.

Thank you for your anticipated cooperation. If you have any questions or concerns you may contact me at the coordinates below.

Insert detailed contact information for the RRFB official who is sending this correspondence.

FOLLOWUP COMMUNICATION FROM WASTE AUDIT PROJECT COORDINATOR TO SITE OPERATORS NOTIFYING OPERATIONAL DETAILS OF PLAN TO CONDUCT WASTE AUDIT

Communication in the form of email or hard copy.

From: Project Coordinator

To: Facility Managers/Operators mailing list

Subject: RRFB Waste Audit Project—Operational Details

Importance: High

You have been notified by RRFB about the waste audit which is about to be conducted, by way of the email shown below. RRFB has arranged for us to take samples of solid waste from your respective facilities and then to sort the materials into a set of categories established by RRFB.

I am writing to outline the key procedural and logistical matters for which your cooperation is requested. Although the audit should not impose any significant burden on your various operations, it will proceed much more smoothly if these points are arranged in advance. I will require certain information to assist with scheduling and selection of samples at your sites, and I will be following up by telephone shortly to interview a representative of your organization concerning this. I also need to understand your requirements for health and safety rules and other operational conditions affecting our presence on your sites.

Edit the following paragraphs very carefully to indicate the intended scope of the audit, such as sampling locations, number of samples at each point, and cooperation in securing scale tickets for each truck from which samples are to be taken.

First, let me briefly explain the scope and process for taking samples: we are contracted to retrieve samples from each landfill, some of which are to be from residential sources and some from ICI. This number and grouping were selected by RRFB. The samples will be taken during several visits to each site, and on each visit we will take two samples: one residential and one ICI sourced. The schedule will see the six visits to each site scattered over the period which has been notified by RRFB. In order to control factors that might affect statistical results, as much as possible, we will schedule visits over this period to arrive on a different weekday each time, and we will endeavour to sample during mornings and afternoons and for different types of trucks, if applicable. We will avoid taking samples on holiday days.

The selection of samples is influenced by the presence of transfer stations in some of the landfill service areas. Since we need to separately sample truck loads from residential versus ICI sources, it is not advisable to try to sample from the mixed loads from transfer stations once they arrive at the landfill. Your cooperation in securing information from transfer station operators, where applicable, will be appreciated.

Another factor which we need to control is the random selection of the trucks entering the landfill (or transfer station) where that day's samples will be taken. This will be done by first knowing the number of vehicles of the type desired, ie: those from residential and from ICI sources expected during the desired time of day. In order to do this systematically, we need your cooperation in helping us estimate the frequency and types of trucks bringing waste from residential and ICI sources, at the times of day that are busiest, and in identifying which they are on sampling days. This is actually not complex, once the traffic pattern is

understood. In some cases where vehicle traffic is light, we may arrange with you for a sample to be taken and set aside the day before the sampling date, for example.

The sampling on site is simple: once the vehicle to be sampled is selected, we would like it to be directed to a place where its load can be discharged and our staff person can safely retrieve the sample, such as a bit off to the side at the tipping face or floor. If it is possible to have your equipment mix up the load prior to sampling, that would be appreciated but it is not essential. As mentioned above, in some cases we will ask your cooperation in setting aside a sample in advance of our arrival.

We will take a sample of at least 135 kg from residential sourced loads and 200 kg from ICI sources. We also need to record the identity of the truck and its payload weight, which can be done by the way best suited to your site. The samples are taken in our truck to an off-site sorting station and categorized in accordance with a standard procedure and table of categories set down by RRFB. We will use a chain of custody form just as would be done for laboratory samples.

Once the samples are sorted and data recorded, we need to dispose of the material. We will keep recyclable material separately bagged, as will have been done during the sorting process, so that it can be easily turned over in that form. The recyclables and residue will be discharged at the site to be visited next, which means that the material sampled will not be returned to its site of origin, but rather to the next site to be visited. The only exception will be any household hazardous waste, which will be segregated and held back at our sorting station, and then taken to its site of origin on the next visit to that site. Over the period of the whole survey, an approximately equal amount of material will have been taken from, and returned to, each of the landfills, so your overall disposal records will be practically unaffected. Also, since each site will have already have been paid whatever tipping fees may have accrued to each sample as that material came into your facilities, we do not expect to pay tipping fees to dispose the residue material when we bring it to the sites.

Please take note of the information I need, so that we can make efficient use of our time when I call. In summary, that information comprises:

- Typical traffic pattern at your site: approximately how many vehicles of what type bring residential and ICI sourced wastes, and at what busiest times of day. For areas where waste is collected on alternating weeks, such as biweekly collection of organics, establishing the weekly rotation.
- Your occupational health and safety requirements for personnel working on your site, hours of operation and any other information you feel we should know. Our sampling personnel will be fitted with safety boots, safety glasses, impermeable coveralls, N95 particulate face mask, reflective vest, cut/puncture resistant gloves, and hard hat, as standard equipment. Our truck will carry a hand sanitizer, portable eye wash, fire extinguisher and first aid kit.

Thank you all in advance for your cooperation. I look forward to discussing this with you shortly, in my phone call.

Insert detailed contact information for the person who is sending this correspondence.

APPENDIX C

Sample Movement Control Form

Insert any special coding or categories related to the source of the sample, relevant to the waste audit

SAMPLE MOVEMENT CONTROL FORM
Waste Audit Services for RRFB

Sample number: _____ Taken at: _____

Method of selection of vehicle sampled and other notes (use back of page if needed):

Approximate weight of sample: _____ kg

ICI or Residential, as well as any geographic designators relevant to the audit

NOTE ANY LARGE OR BULKY ITEMS IN SAMPLE ON BACK OF FORM (example: 1 washing machine in trunk load)

=====

PART 1: COLLECTION OF SAMPLE AT ORIGIN

Sample taken by: X _____ Time & Date: _____ / _____ 2 _____
Truck bin: front – 1 2 3 4 – back (circle)

=====

PART 2: RECEIVING SAMPLE AT SORTING STATION

Sample received by: X _____ Time & Date: _____ / _____ 2 _____

Print name: _____

=====

PART 3: DISCHARGE OF SAMPLE AFTER SORTING

Recyclables: at location: _____

Discharge by: x _____ Time & Date: _____ / _____ 2 _____

Print name: _____

Residue: at location: _____

Discharge by: x _____ Time & Date: _____ / _____ 2 _____

Print name: _____

Household Hazardous Waste (if none, print "none"): at location: _____
or organics disposed locally (if none, print "none" or write details on back of form) _____ kg

Discharge by: x _____ Time & Date: _____ / _____ 2 _____

Print name: _____

APPENDIX D

Sample Data Recording Form

Insert any special coding or categories related to the source of the sample, relevant to the waste audit

Sample Data Recording Form

Sample serial number:

Sample taken at:

Date of sampling:

Sample sorted by:

Sample number:

Sample size (kgs):

Source:

ICI or Residential, as well as any geographic designators relevant to the audit

Results Reviewed by:

MATERIAL CATEGORY

SUB-CATEGORY

SEPARATION OF SUB-CATEGORIES

FIBRE

Uncoated Paper - newsprint quality

- 1 Dailies
- 2 Weeklies
- 3 Magazines - uncoated
- 4 Flyers/inserts - uncoated
- 5 Telephone Books/Yellow Pages
- 6 Magazines - glossy
- 7 Catalogues/Calendars
- 8 Flyers/inserts - glossy
- 9 Hard cover
- 10 Soft cover
- 11 None
- 12 Specialized purpose
- 13 Boxboard cardboard - single layer
- 14 Corrugated cardboard - multi layer - dry
- 15 Waxed corrugated cardboard - multi-layer
- 16 Fast-food boxboard
- 17 Fast-food wrap
- 18 Molded Pulp
- 19 Kraft paper bags/wrap
- 20 Laminated paper bags/boxboard

Coated Paper - catalogue quality

Books

Mixed Fines

Other

Packaging

ORGANICS

Food Waste

Tissue

Yard Waste

Other

Fibre

- 21 Home/ICI food waste not in containers (see 24)
- 22 Facial tissue and gift wrapping paper tissue
- 23 Home/ICI gardening, brush, leaves,
- 24 Food in containers, including weight of containers
- 25 Wet paper and cardboard

DAIRY	Beverage - Dairy milk only	26	Polycoat (gable top) - 1 litre and greater	
		27	Polycoat (gable top) - less than 1 litre	
		28	Plastic jug (HDPE - Number 2) - 1 litre and greater	
		29	Plastic jug (HDPE - Number 2) - less than 1 litre	
			30	Tetra pak
			31	Plastic bag (LDPE film - Number 4)
		Ice Cream	32	Plastic container (HDPE - Number 2)
			33	Boxboard container (with lining)
		Other Dairy	34	Plastic container (HDPE - #2, PP - #5, PS - #6)
			35	Plastic container (other than 2, 5 and 6)
		36	Tetra pak	
	Non-fluid Milk Product	37	Plastic film	
NON-DAIRY	Beverage - Non-Dairy alternatives	38	Polycoat (gable top)	
		39	Plastic container	
		40	Tetra pak	
		Foodstuffs	41	Tetra pak
PLASTIC	Food and other container packaging	42	PET - Number 1	
		43	HDPE - Number 2	
		44	PVC - Number 3	
		45	LDPE - Number 4	
		46	PP - Number 5	
		47	PS - Number 6	
		48	Other - Number 7	
		49	Non-numbered containers	
				50
		Composite packaging	51	LDPE - Number 4
		Plastic Bags/Film	52	LDPE - Number 4 - not suitable for recovery
			53	LDPE - Number 4 - Other bags, film packaging, wrap
			54	PP - Number 5 - Agriculture
		Non-packaging End-of-Life Products	55	Crates, pails and tubs
			56	Consumer goods
		57	Non-program electronic products/components	
		58	Non-program paint products	
		59	Non-Municipal Hazardous and Special Waste	
DISPOSABLE CUPS	Fibre	60	Disposable cups - branded - hot	
		61	Disposable cups - branded - cold	
		62	Disposable cups - other	
	Plastic	63	Single use - branded	
		64	Single use - non-branded	

GLASS	Food and Consumer Goods Packaging	65	Clear - food containers
		66	Coloured - food containers
		67	Clear - non-food containers
		68	Coloured - non-food containers
	Automotive Other Products	69 70	
METAL	Food and Consumer Goods Packaging	71	Aluminum food containers
		72	Aluminum - other
		73	Steel food containers
		74	Steel composite containers
		75	Steel - other
	Non-Paint Program Pressurized Containers	76	Aluminum
		77	Steel
	Non-Electronics Program items	78	Appliances - small
		79	Appliances - large
		80	Electronics - small
	Other	81	Electronics - large
82		Extension cords and wire of uncertain materials	
MUNICIPAL HAZARDOUS AND SPECIAL WASTE (MHSW)	Pressurized gas containers	83	Non-refillable
		84	Re-fillable
	Marine flares	85	by symbol or container type
		86	by symbol or container type
	Mercury containing products Batteries	87	Non-rechargeable
		88	Rechargeable
		89	Lithium-ion
	Sharps and Pharmaceuticals Pesticides and their containers	90	None
		91	PCA regulated products
	Automotive fluid containers	92	Non-PCA regulated products
		93	HDPE - Number 2
		94	PP - Number 5
	Other fluids, fuel, lubricants & containers	95	Other
		96	HDPE - Number 2
		97	Other
	Solvents and containers	98	
	Corrosives and containers	99	
(Crankshaft) oil filters	100		
Oily rags	101		
TEXTILES	Fabric	102	Clothing
		103	Household use

	Footwear	104	
	Other	105	
C&D	Wood	106	dimensional - clean
		107	dimensional - coated
		108	engineered/composite - clean
		109	engineered/composite - coated
		110	pressure-treated
	Wallboard and coverings	111	drywall - clean
		112	drywall - coated
	Shingles	113	asphalt
		114	other
	Flooring	115	carpet
		116	other
	Insulation	117	fibreglass
		118	foam (PS)
		119	other
	Glass	120	window/door
		121	decorative
	Countertops	122	laminare
		123	slate/marble
	Ceiling Tile	124	None
BULKY ITEMS	Furniture	125	mattresses - coil
		126	mattresses - foam
		127	mattresses - futon
		128	box spring
		129	upholstered - seating
		130	solid wood
		131	engineered/laminare wood
		132	other (non-plastic)
SPECIAL CARE WASTE	Diapers	133	
	Other	134	Medical gloves, pharmaceuticals, cosmetics
REDEEMABLE CONTAINERS	Beverage	135	Sort 1 - Aluminum cans
		136	Sort 2 - Glass - clear
		137	Sort 3 - PET - clear
		138	Sort 4 - Glass -coloured
		139	Sort 5 - PET - green
		140	Sort 6 - Other plastic (3, 5, 6 &7)
		141	Sort 8 - Steel cans
		142	Sort 9 - Gable top

		143	Sort 10 - Tetra pak	
		144	Sort 11 - HDPE - translucent	
		145	Sort 13 - PET - blue	
		146	Sort 21 - Glass - clear (over 500 ml)	
		147	Sort 22 - Glass - coloured (over 500 ml)	
		148	Sort 23 - Liquor PET - clear and coloured (over 500 ml)	
		149	Sort 24 - Liquor PET - clear and coloured	
		150	Sort 25 - Liquor - other	
		151	Sort 26 - Liquor - other (over 500 ml)	
REGULATED PAINT	Empty plastic	152		
	Empty metal	153		
	Empty aerosols	154		
REGULATED TIRES	Passenger and Light Truck	155		
	Tractor Trailer	156		
OFF-ROAD TIRES	Non-Tire Program items	157	Small	
		158	Large	
REGULATED ELECTRONICS	Computers	159	Desktop	
		160	Portable	
	Computer Peripherals	161		
	Desktop Printers	162		
	Display Devices	163		
	Personal/Portable A/V Systems	164		
	Vehicle A/V Systems	165		
	Home Theatre in a Box	166		
	Home Audio/Video Systems	167		
	Non-cellular telephones	168		
	Cellular telephones	169		