

SOLID WASTE COMPOSITION STUDY

for

**Regional District of North Okanagan
9848 Aberdeen Road
Coldstream, B.C.
V1B 2K9**

**Technology Resource Inc.
102 – 980 West First Street
North Vancouver, B.C.
V7P 3N4**

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EXECUTIVE SUMMARY

Direct analysis of solid waste provides important information about the composition of waste produced by residential, commercial, industrial and institutional sources. The information is a useful tool for authorities in charge of the reduction and management of the solid waste stream. The Regional District of North Okanagan (RDNO) is responsible for managing solid waste within its boundaries and relies on solid waste composition studies to provide information about the various waste streams and to assist with the development of waste reduction strategies. In order to generate data describing the current composition of the RDNO solid waste stream and to identify areas where alternative waste management options may exist, Technology Resource Inc. (TRI) completed a Solid Waste Composition Study.

The study was completed at six Recycling and Disposal Facilities (RDFs) in the RDNO between May 9 and June 18, 2005. A total of 131 waste samples were collected and analyzed. Once the source of each sample was identified, the sample was weighed and sorted into 14 primary categories and 63 secondary categories; the mass of each category was subsequently recorded and used to calculate the sample composition. To determine the degree of spread of the composition data sets, the standard deviation of the mean for each primary and secondary waste category (by waste source) was calculated. The Kolmogorov-Smirnov goodness of fit test was also applied to selected waste sort data sets to determine whether the compositions were normally distributed.

The primary category with the highest mean composition was organic waste for all RDFs, exhibiting a mean composition ranging from 27.3% to 61.1% of the total waste stream. Comparison with the 1998 Waste Composition Survey (in which organic material comprised between 27% and 49% of the waste stream) indicates that organic materials has and continues to represent the most significant component of the waste stream. Efforts to divert organic materials from the waste stream appear to have had little or no impact since 1998.

The primary category showing the next highest composition at all RDF sites (with a single exception) was the construction materials category, ranging in mean composition from 6.4% to 21.5% of total waste. The input of construction materials at RDFs appears to have increased slightly since the 1998 study, which showed a range in mean composition from 2.5% to 16.2% of the total waste stream. The slight increase in construction waste delivery to the RDFs may be indicative of i) the general increase in construction and renovation activities the RDNO has been experiencing recently and/or ii) the waste sorting period (May to mid June) coinciding with the initiation of the construction and renovation season.

The general trend in mean composition for the remainder of the primary waste categories consists of the paper, plastic, glass and metals categories. Collectively, these four categories comprise a mean composition ranging from approximately 19.2% to 35% of the total waste stream. This is consistent with the 1998 findings.

The highly variable standard deviation in the waste sort data sets can be attributed to the lack of an adequate number of samples and/or a limited sampling period. The Kolmogorov-Smirnov goodness of fit



tests indicated a high occurrence of normal distribution for selected waste sources from the Armstrong/Spallumcheen RDF. The primary waste category compositions of paper, glass, plastic, organics and textiles for the Greater Vernon RDF and the Armstrong/Spallumcheen RDF also exhibited a high occurrence of normal distribution. Generally, data sets that follow a normal distribution are more likely to be representative than data sets that do not.

The results of this study are consistent with the 1998 Waste Composition Survey and indicate that diversion of organics from the waste stream represents the single most significant avenue for the reduction of waste entering the RDNO landfills. In keeping with the objectives of the 2002 RDNO Waste Management Plan Update, existing education and demonstration projects encouraging composting should be continued and / or supplemented with additional programs under the auspices of the RDNO Waste Management Education and Communication Plan.

Diversion of construction materials, paper, plastic, glass and metals, while comprising a significantly smaller component of landfilled waste, also provides an opportunity for waste reduction since most of these waste components are already the subject of RDNO-wide recycling initiatives (*i.e.* Blue Bag Program). Expansion of the recycling programs to underserviced areas and a continuation of the education campaign are recommended.

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1 INTRODUCTION

In 1995, the *Waste Management Act* was amended to require regional district governments to prepare a waste management plan that would reduce the per capita quantity of solid waste placed in landfills by 50%. The Regional District of North Okanagan (RDNO) prepared a Waste Management Plan in 1995, which was updated in 2002¹ (Plan Update 2002). Several features of the Plan Update 2002 include encouragement of ecological sustainability, reduction of the waste streams in accordance with the ‘3Rs’ principle and consideration of the ‘zero waste’ philosophy. The primary objectives of the RDNO Plan Update 2002 included:

- reducing the per capita weight of waste placed in landfills beyond 50% and extending the life of RDNO landfills; and
- promoting a waste reduction and recycling program.

The RDNO is responsible for managing solid waste within its boundaries and relies on solid waste composition studies to provide information about the waste streams generated by residents, businesses, institutions and industry. The studies are useful for managing waste flows, and can help with the development and implementation of waste reduction strategies. To determine the effectiveness of waste diversion and reduction strategies, Technology Resource Inc. (TRI) completed this Solid Waste Composition Study (the Study). The scope of work was to:

- Collect the data necessary for further waste management planning and to determine how much further effort should be spent on waste reduction programs;
- Employ a standard methodology²;
- Provide accurate information on origin and load weights for each waste sample; and
- Interview RDF staff, waste haulers, managers, drivers, and RDNO staff to assist in organizing the survey and to identify areas of concern.

The assessment of the overall composition of waste generated within the RDNO was undertaken with samples from the following Recycling and Disposal Facilities (RDFs):

- Greater Vernon Landfill;
- Armstrong/Spallumcheen Landfill;
- Lumby Landfill;
- Cherryville Landfill;
- Kingfisher Transfer Station; and
- Silver Star Transfer Station.

¹ Regional District of North Okanagan (1995/2002) *Waste Management Plan, Plan Update 2002*.

² BC Ministry of Water, Land and Air Protection (MWLAP) (1991). *Procedural Manual for Municipal Solid Waste Composition Analysis*.



The purpose of the Study is to generate data describing the current composition of the RDNO solid waste stream and to identify areas where alternative waste management options may exist. The Study involved the selection of representative waste samples from Residential, Industrial, Commercial, and Institutional sources. A previous waste composition report³ serves as a baseline for comparison.

During the waste composition analysis, the wet mass of the waste samples and compositions were recorded. In this report, "hauler" refers to the vehicle delivering the waste, "load" refers to the total amount of waste contained in a hauler, "sample" refers to the portion of the load that was sorted and weighed, and "load source" refers to the origin of a specific sample (see categorizations in Section 2.2).

³ Footprint Environmental Consultants (November 23, 1998) *Waste Composition Survey*.



2 METHODOLOGY

2.1 Design of the Sampling Program

The sampling program was based on a previous solid waste composition study completed for the RDNO³, with modifications made according to the requirements of the present Study.

All samples were sorted at either the Greater Vernon Landfill (GVL), Armstrong/Spallumcheen Landfill (AL) or at the Lumby Landfill (LL). Samples from the Silver Star Transfer Station (SST) were delivered under the supervision of RDNO staff to the GVL for analysis. Samples from the Kingfisher Transfer Station (KFT) were delivered to the AL, and samples from the Cherryville facility (CL) were delivered to the Lumby RDF.

2.2 Load Source and Sample Acquisition

Waste samples were classified as originating from one of five sources:

1. Commercial haulers delivering waste from Industrial, Commercial and Institutional (ICI) sources (Comm ICI);
2. Commercial haulers delivering waste from Residential sources (Comm Res);
3. Commercial haulers delivering waste from mixed ICI and Residential sources (Comm ICI/Res);
4. Self-haul Residential (S-H Res); or
5. Self-haul ICI (S-H ICI).

Every effort was made to randomly select loads for sampling, with the overall goal of achieving an even distribution of loads between the above five sources. When few trucks were arriving at a site however, any load available was selected for sampling. The composition of S-H ICI loads was observed to be relatively consistent; therefore, only two S-H ICI samples were analysed. Qualitative observations about other S-H ICI loads arriving at sort locations were recorded.

Greater Vernon, Armstrong/Spallumcheen and Lumby Landfills

Both commercial and self-haul vehicles deliver waste to these landfills.

Self-haul loads were obtained by approaching individual customers at each site and requesting a sample from their load. The sort supervisor randomly selected a sample from each self-haul load once permission to analyze the waste was obtained from the customer. The load mass was recorded at the scale house, and this information was obtained by the sort supervisor at the end of each day.



Commercial loads were dumped by hauler operators at the landfill face. A front-end loader would then take a portion of the load to the sort area. The sort supervisor randomly selected a sample from the bucket contents. The sort supervisor confirmed the truck number and the source of a given load with the front-end loader operator. The truck number was then relayed to the scale house operator so that the load mass could be obtained at the end of the day.

Cherryville, Kingfisher and Silver Star Facilities

At each of these facilities, waste which had been dropped off by numerous customers (S-H Res waste) was collected and delivered to the GVL, AL or LL for sorting. The waste from the KFT and CL was divided into three equal sections by the sort supervisor. One sample was taken from each of the three sections. The waste from the SST was misdirected, and as a result only a single sample was obtained. A S-H Res load delivered to the sort location by a customer from Silver Star was sampled and assigned to the SST data set.

2.3 Sort Method

Large items in the sample were weighed and discarded. The rest of the sample was weighed and spread onto a sorting table. From the table the waste was sorted into bins representing 63 secondary categories. The waste composition categories used for the present Study are provided in Appendix A.

The sorting was performed by three labourers and carefully overseen by the sort supervisor. The labourers received training in the sort method, so that identification of each waste item on the sort table could be made and the item placed in the appropriate bin. The bins were arranged on tables such that they were readily accessible from the sort table. The sort supervisor watched for items placed in incorrect bins and identified categories for unusual items. After the sample was sorted, the mass of each category was recorded.

The categorization of items was generally straightforward. A magnet was used to distinguish between ferrous and non-ferrous metal items. Food in containers was separated from the container, where possible. Items which contained multiple components which could not be separated, such as metal and plastic, were placed into the other/multi-material categories.

The following is a list of equipment that was used in performing the Study at each location.

- Five tables for sorting and bin display
- Three tents
- One 100-kilogram (kg) platform scale
- Four each: magnets and knives
- One pair garden scissors
- One broom
- One shovel
- One rake



- Four pairs of tongs
- One laptop computer
- Four clipboards
- Two calculators
- Permanent markers
- Disposable rags for cleaning tables
- Digital camera or camera and film
- Duct tape
- Ten large-size household garbage cans
- 100 smaller, office-size garbage bins
- Plastic garbage bags
- One pick-up truck for moving between the sites
- Electric Lighting (Armstrong/Spallumcheen RDF only)

2.3.1 Safety Precautions

The sort supervisor and all labourers received health and safety training to manage the hazards associated with sorting waste as well as site-specific hazards. All workers also had up-to-date tetanus shots. Sharp objects (*i.e.* straight razors, syringes and broken glass) in the waste presented a significant hazard. Tongs were used to sort through waste when medical waste or signs of sharps were identified in the waste stream. Syringes and other sharp items were immediately placed in a medical waste container upon discovery.

The most important safety issue at the Lumby RDF was the constant truck traffic. Visual contact with drivers was made when directing the dumping of samples. Pylons were also used at the Lumby RDF to identify the sort area. At the Greater Vernon and Armstrong/Spallumcheen RDFs, samples were sorted in covered structures away from vehicle traffic.

The following safety equipment was used by workers at each site.

- High visibility vests
- High visibility pylons as required
- Disposable nitrile gloves
- Thick protective gloves
- Protective eyewear as required
- Dust masks as required
- Cotton or tyvek overalls as required
- PVC aprons as required
- Steel toe and shank work boots
- Ear plugs as required
- One first aid kit



- One 5 lb. fire extinguisher
- Disinfectant soap and paper towels
- Antiseptic towelettes

2.4 Data Analysis

Once all of the data had been entered into spreadsheet format, the mean compositions for all categories, primary and secondary, were calculated for waste from all sources. Standard deviations about the means were also determined.

For large data sets (*i.e.* Comm ICI, Comm Res and S-H Res at the GVL, and Comm Res and S-H Res at the Armstrong/Spallumcheen RDF), the Kolmogorov-Smirnov goodness of fit test was used to determine whether the primary category compositions were normally distributed. The Kolmogorov-Smirnov test plots the set of sample values in a standardized form and compares the plot with an expected normal distribution model. The test provides the maximum difference between the sample data and the normal distribution. This value is compared with a tabulated critical value at the desired confidence interval. For the purposes of this Study a confidence interval of 95% was used. A maximum difference that is less than the tabulated critical value indicates that the sample data is normally distributed.

2.5 Quality Assurance and Quality Control Procedures

In addition to the methods described above, a quality control program was undertaken concurrently with the Study to ensure accurate results. The raw waste composition data was reviewed on a daily basis following the sorts. This allowed the sort supervisor to determine if items had been omitted from the data sheets. Also, the accuracy of 10% of the data in spreadsheet format was reviewed by office staff. The accuracy of all data was reviewed by calculating the difference between the sum of the sorted category masses and the unsorted sample mass. Data entry corrections were made as necessary for the samples exhibiting discrepancies greater than 5% of the unsorted sample mass.



3 RESULTS AND DISCUSSION

3.1 Sample Source and Distribution

A total of 131 waste samples were sorted during the Study. The mean sample size ranged from 132 kg at the Armstrong/Spallumcheen RDF to 143 kg at the Lumby RDF. The mean sample masses are consistent with the recommended sample size requirement².

Twenty-four loads were sampled from the Armstrong/Spallumcheen RDF between May 9, 2005 and May 17, 2004. Ninety loads were sampled from the Greater Vernon RDF between May 18, 2005 and June 15, 2005. Three loads were sampled from the Kingfisher RDF on May 16, 2005. Two loads were sampled from the Silver Star RDF on May 27, 2005. Nine loads were sampled from the Lumby RDF and three loads were sampled from the Cherryville RDF between June 16 and June 18, 2005. Photographs taken during the waste sorting operations are provided in Appendix D.

A summary of the number of samples and sources of waste sorted at each RDF is provided in Table 1.

Table 1: Number of samples and total mass sorted

Waste Source	GVL		AL		LL		CL		KFT		SST	
	samples sorted	mass sorted (tonnes)										
Comm ICI	32	4.51	3	0.35	1	0.14	-	-	-	-	-	-
Comm Res	33	4.72	8	0.41	2	0.28	-	-	-	-	-	-
Comm ICI/RES	5	0.72	3	0.43	-	-	-	-	-	-	-	-
S-H Res	19	2.72	9	1.19	6	0.04	3	0.42	3	0.42	2	0.28
S-H ICI	1	0.14	1	0.15	-	-	-	-	-	-	-	-
Total	90	12.82	24	2.54	9	0.45	3	0.42	3	0.42	2	0.28

Note: “-” indicates that no samples from the waste source were analyzed. CL, KFT, and SST receive only self-haul waste.

The variability in the number of waste sample sorts between the RDFs reflects the distribution of waste tonnages received at each of the respective RDFs. As such, approximately 69% of waste sorts were completed at the Greater Vernon RDF which received 74% of the RDNO waste in 2004⁴. Similarly, 18% of waste sorts were completed at the Armstrong/Spallumcheen RDF which received 22% of waste in 2004. Collectively, these two RDF's represent a large component (approximately 96%) of total waste deposited in all RDNO landfills in 2004. The remaining 4% of the waste deposited to RDNO landfills in

⁴ Regional District of North Okanagan (May, 2005) 2004 Solid Waste Management Program Annual Report (prepared by N. Kohnert, Solid Waste Manager).



2004 is collected at the Lumby, Cherryville, Kingfisher and Silver Star RDFs. Thus, the distribution of waste sorts approximately represents the relative distribution of waste deposited throughout the RDNO facilities.

Visual observations of S-H ICI loads being delivered to the sort facilities indicated that these loads consisted mainly of Demolition, Landscaping and Construction (DLC) waste. Under the direction of RDNO staff, a single S-H ICI load was sorted during the Study.

3.2 Waste Composition by Category

The primary and secondary category compositions for all waste sorts are presented in raw form in Appendix B. A review of the mean primary category compositions (summarized in Table 2) for all the RDFs indicated several significant findings. The primary category with the highest composition at all six RDF sites is the Organic category, exhibiting a range in mean composition from 27.3% at the Cherryville RDF to 61.1% at the Silver Star RDF. It is postulated that the increased organic component at Silver Star may reflect the lack of curbside collection at this isolated RDF.

The primary category showing the next highest composition at all RDF sites (with the exception of the Armstrong/Spallumcheen RDF) was the Construction materials category, ranging in mean composition from a low of 6.4% at the Silver Star RDF to a high of 21.5% at the Kingfisher RDF. Since the Spring and Summer seasons typically reflect an increase in construction and renovation activities (and associated delivery of waste to the RDFs), it is postulated that the elevated mean composition exhibited by the construction category can be attributed to the waste sorting period (May to mid June) coinciding with the initiation of the construction and renovation season.

At the Armstrong/Spallumcheen RDF, the second highest mean composition was attributed to the Paper category, comprising 11.8% of the total sorted waste.

The general trend in mean composition from the remainder of the primary waste categories consists (in descending order) of the Paper, Plastic, Glass and Metals categories. Collectively, these four categories comprise a mean composition ranging from approximately 19.2% at the Silver Star RDF to 35% at the Armstrong/Spallumcheen RDF. The remaining mean composition of sorted waste is comprised of the Leather, Rubber, Brown goods, Bulky goods, Textiles, Residual, Hazardous and Other categories.

The mean composition results for the primary categories obtained at each site are presented in Tables 4 through 9 (following the main body of the report), and summarized in Table 2 (below). A graphical presentation of the primary category data follows Table 2. Note that N represents the number of samples in a given data set, and that +/- represents standard deviation.



Table 2: Mean Composition of Primary Categories

Primary Category	GVL (N=90)			AL (N=24)			LL (N=9)			CL (N=3)			KFT (N=3)			SST (N=2)		
	Composition		Total Sorted Mass (kg)															
	Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)	
Paper	9.27%	7.81%	1183.63	11.87%	7.39%	372.93	11.10%	8.41%	141.75	7.81%	6.05%	33.08	9.44%	3.72%	39.87	6.54%	9.24%	16.90
Glass	2.12%	3.38%	270.62	3.57%	2.95%	108.08	2.69%	1.67%	34.78	10.79%	11.45%	46.04	4.94%	1.31%	20.94	4.70%	6.65%	12.16
Metals	3.26%	4.16%	417.07	10.38%	12.99%	315.24	3.64%	4.46%	47.18	2.28%	1.81%	9.63	4.34%	1.63%	18.48	1.30%	1.84%	3.37
Plastic	7.64%	7.06%	973.21	10.28%	4.02%	320.43	9.30%	5.20%	119.88	4.99%	1.82%	21.15	15.44%	3.87%	65.48	6.68%	9.45%	17.27
Leather	0.22%	0.64%	28.58	0.42%	0.57%	13.83	0.13%	0.32%	1.70	0.37%	0.63%	1.54	0.28%	0.48%	1.16	0.00%	0.00%	0.00
Rubber	1.80%	4.29%	232.58	1.39%	3.81%	43.54	1.54%	3.64%	19.48	11.27%	11.56%	47.70	0.78%	0.72%	3.30	0.03%	0.04%	0.08
Organic	49.84%	25.39%	6369.18	33.78%	15.96%	1093.27	44.31%	26.57%	566.40	27.30%	4.43%	115.78	28.50%	4.31%	120.78	61.15%	36.83%	178.08
Brown Goods	2.16%	6.91%	275.57	7.40%	12.80%	248.66	3.23%	6.24%	41.60	3.16%	4.65%	13.50	4.96%	4.06%	21.26	0.84%	1.19%	2.18
Bulky Goods	0.37%	3.09%	47.45	0.28%	1.03%	8.43	0.00%	0.00%	0.00	2.83%	4.91%	12.12	0.00%	0.00%	0.00	7.02%	9.93%	18.16
Textiles	3.58%	4.84%	457.33	5.39%	4.88%	167.20	3.82%	2.80%	48.68	8.54%	9.50%	36.18	3.37%	2.10%	14.21	1.30%	1.84%	3.36
Construction	11.58%	22.72%	1501.36	5.83%	7.76%	170.03	11.80%	17.53%	152.43	17.09%	14.80%	72.55	21.55%	16.77%	92.44	6.41%	9.06%	19.50
Residue	0.63%	0.71%	80.85	0.00%	0.00%	0.00	0.67%	0.74%	8.64	0.24%	0.21%	1.00	0.00%	0.00%	0.00	0.47%	0.67%	1.22
Hazardous	6.68%	9.79%	872.51	6.82%	5.56%	221.56	8.02%	7.37%	104.31	3.32%	2.14%	14.11	2.14%	1.76%	8.98	5.85%	8.27%	15.12
Other	0.05%	0.34%	6.07	1.13%	1.14%	35.53	0.00%	0.00%	0.00	0.00%	0.00%	0.00	1.27%	0.90%	5.33	0.00%	0.00%	0.00

Note: GVL = Greater Vernon Landfill, AL = Armstrong/Spallumcheen Landfill, LL = Lumby Landfill, CL = Cherryville Landfill, KFT = Kingfisher Transfer Station, and SST = Silver Star Transfer Station

N = number of samples

+/- = standard deviation

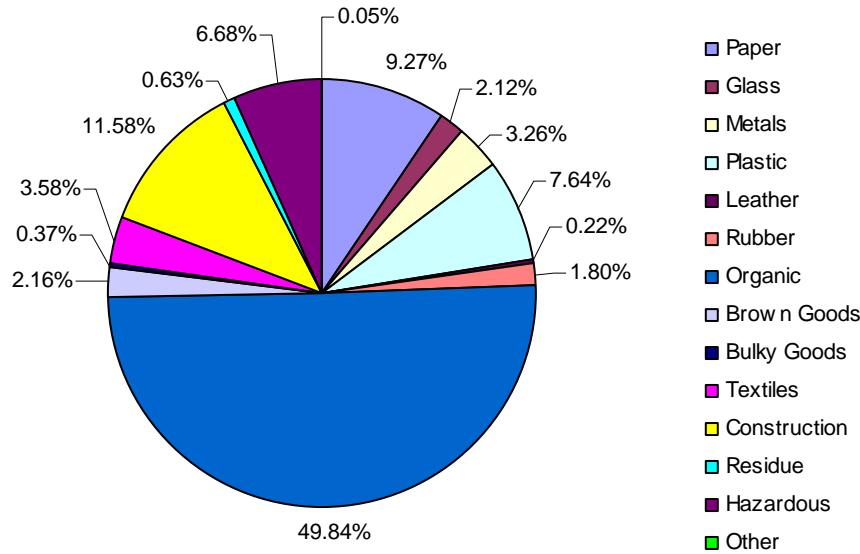
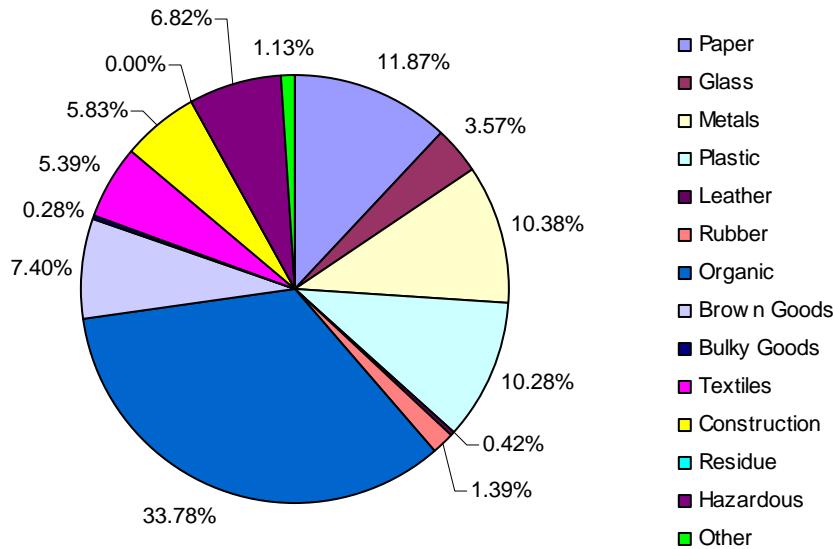
Figure 1: Mean primary category compositions - Greater Vernon RDF (N = 90)**Figure 2: Mean primary category compositions - Armstrong/Spallumcheen RDF (N = 24)**

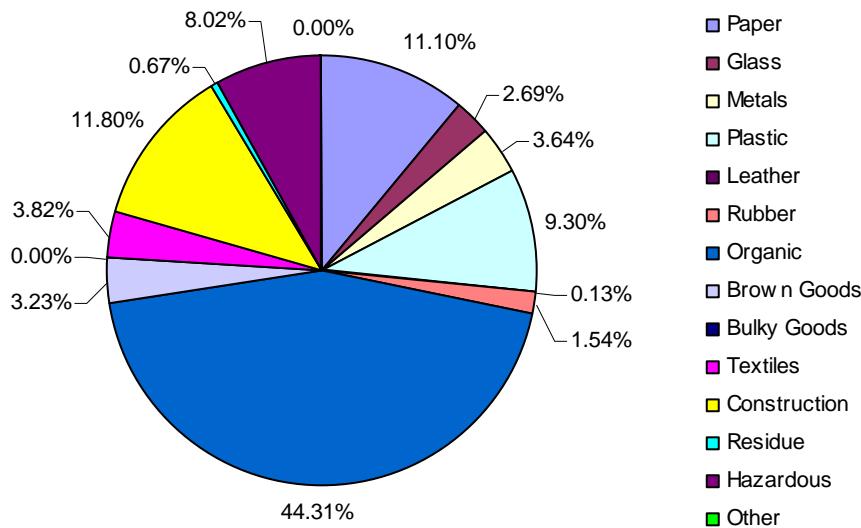
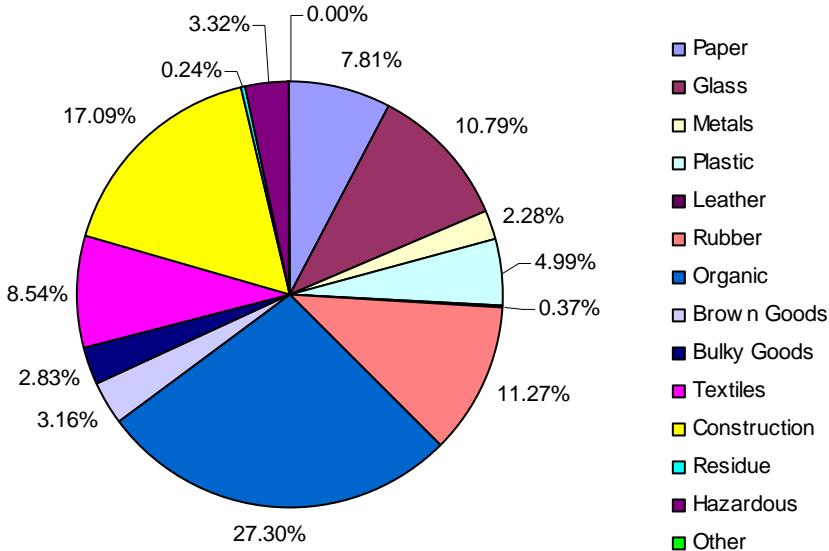
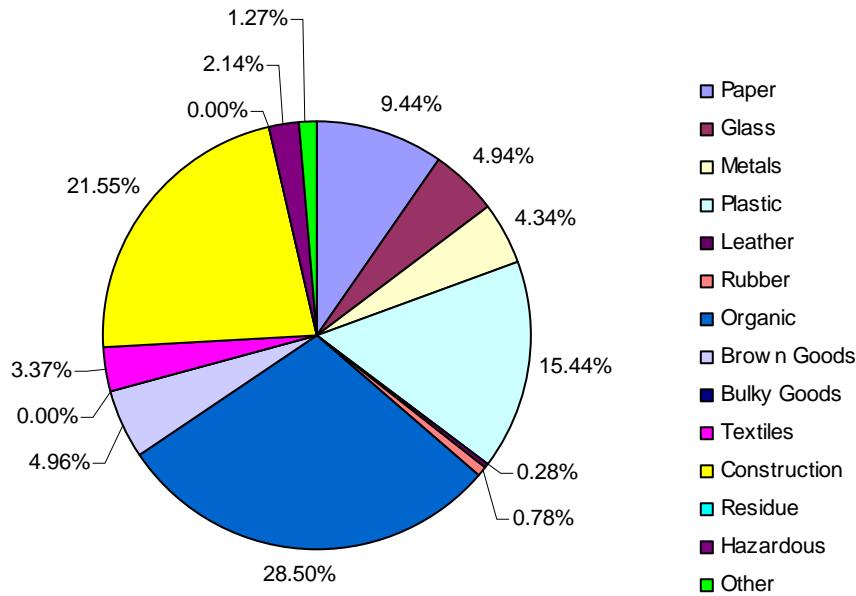
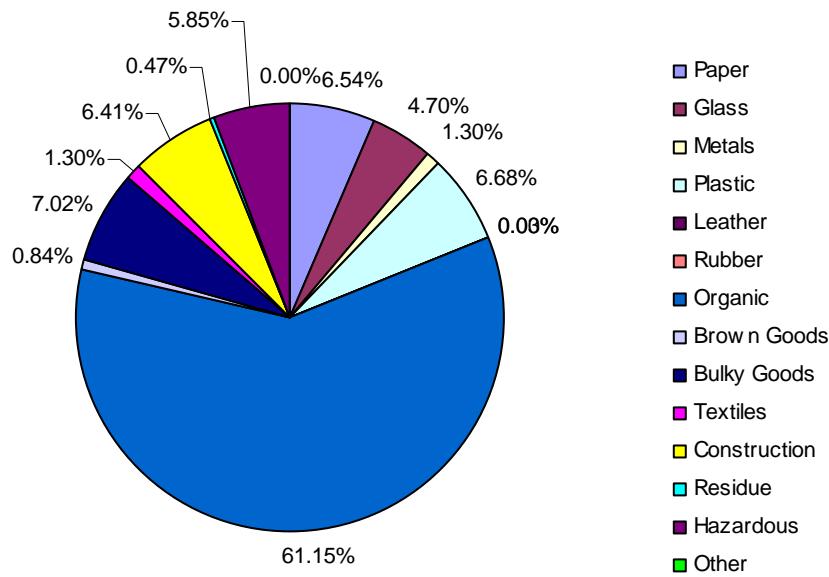
Figure 3: Mean primary category compositions - Lumby RDF (N = 9)**Figure 4: Mean primary category compositions – Cherryville RDF (N = 3)**

Figure 5: Mean primary category compositions - Kingfisher RDF (N = 3)**Figure 6: Mean primary category compositions - Silver Star RDF (N = 2)**

The mean secondary category compositions of waste sorted at all sites are presented in Tables 10 through 15, according to each waste source. The tables provide a summary of waste compositions extracted from each of the aforementioned primary waste categories.

Qualitative observations made by the sort supervisor indicate that self-haul loads delivered to the RDFs include significant quantities of items (*e.g.* large and small appliances, furniture and sports equipment) which are still in good working condition. Of significance was the lack of drop-off areas for reusable goods at the Greater Vernon RDF and at the Armstrong/Spallumcheen RDF; a small drop-off area was identified at the Lumby RDF.

3.3 Qualitative Comparison with the 1998 Waste Composition Survey

The findings of the Study become particularly meaningful when compared with the results of a similar waste composition survey completed in 1998³. This section presents a qualitative comparison between the data collected during the present Study and the 1998 data. Given the small sample size for many of the data sets and the exclusion of sampling from the Silver Star RDF during the 1998 survey, the comparison is not statistically rigorous.

Organic material comprised the majority of the waste delivered to the RDFs in 1998, contributing between 27% and 49% of the waste stream. This range in composition is consistent with the findings of the current Study (with organic mean compositions ranging from 27.3% to 61.1%) indicating that organic material has and continues to represent the most significant component of the waste stream. Based on the results of this Study, efforts to divert organic materials from the waste stream appear to have had little or no impact since 1998.

The deposition of Construction materials to RDFs appears to have increased since the 1998 study which showed a range in mean composition from 2.5% to 16.2% of the total waste stream. The present Study revealed a range in mean composition for Construction materials between 6.4% to 21.5%. The slight increase in Construction waste delivery to the RDFs may be indicative of a general increase in construction and renovation activities the RDNO has been experiencing recently.

Comparison with the 1998 data also indicate that Paper, Plastic, Glass and Metals continue to comprise lesser but significant components of the waste stream.

3.4 Statistical Analysis

Whenever a mean value of a data set was calculated, the standard deviation was also generated. The standard deviation is a representation of the degree of spread of the data about the mean. An elevated standard deviation indicates a greater spread than does a lower standard deviation. Standard deviations are presented with the corresponding means in the Study data tables. Elevated standard deviations were often encountered for small data sets, or when a mean was calculated for multiple-waste-source composition data, as was done for Table 2.



For large data sets (*e.g.* Comm ICI, Comm Res and S-H Res at the Greater Vernon RDF, and Comm Res and S-H Res at the Armstrong/Spallumcheen RDF), the Kolmogorov-Smirnov goodness of fit test was used to determine whether the primary category compositions were normally distributed. The Kolmogorov-Smirnov test plots the set of sample values in a standardized form and compares the plot with an expected normal distribution model. The test provides the maximum difference between the sample data and the normal distribution. This value is compared with a tabulated critical value at the desired confidence interval. For the purposes of this Study a confidence interval of 95% was used. A maximum difference that is less than the tabulated critical value indicates that the sample data is normally distributed.

Table 3 identifies those primary waste category compositions (using the aforementioned data sets) that are normally distributed. Detailed results of the statistical test are provided in Appendix C.

Table 3: Primary Waste Category Compositions Showing a Normal Distribution

Primary category	Data set follows a normal distribution				
	Comm ICI		Comm Res		S-H Res
	GVL	GVL	AL	GVL	AL
Paper	Yes	Yes	Yes	Yes	Yes
Glass	No	Yes	Yes	Yes	Yes
Metals	Yes	No	Yes	No	Yes
Plastic	Yes	Yes	Yes	Yes	Yes
Leather	No	No	Yes	No	Yes
Rubber	No	No	Yes	No	No
Organic	Yes	Yes	Yes	Yes	Yes
Brown Goods	No	No	Yes	No	Yes
Bulky Goods	n/a	n/a	Yes	No	n/a
Textiles	No	Yes	Yes	Yes	Yes
Construction	No	No	Yes	Yes	Yes
Residue	No	Yes	n/a	No	n/a
Hazardous	No	No	Yes	Yes	Yes
Other	n/a	n/a	Yes	No	Yes

Note: n/a indicates insufficient category mass for the application of the Kolmogorov-Smirnov test

The primary category compositions of Paper, Glass, Plastic, Organic, and Textile waste show a high occurrence of normal distribution. For Comm Res and S-H Res wastes from the Armstrong/Spallumcheen RDF, the results for most primary categories exhibit a high occurrence of normal distribution. Results from the Rubber category are generally not normally distributed. While the goodness of fit to a normal distribution does not imply that a given data set is or is not accurate, data that fits the distribution is more likely to be representative than a data set that does not.

3.5 Limitations: Sources of Error During the Sorts

At the conclusion of a given sort, there was usually a small discrepancy between the total sample mass and the sum of the sorted category masses. Sample material being blown by the wind or accidentally falling to the floor would result in a sorted category mass less than the total sample mass. Efforts were made to minimize such sources of error. Data recording errors were the main reason for the sum of the category masses greater than the total sample mass. Such errors were usually minor.

The absolute value of the difference between the sum of the category masses and the total sample mass was calculated for each sort. The mean of the absolute values was then determined for each waste source. This mean ranges from 0.60 to 3.24%. These discrepancies were considered to be minor.

4 CONCLUSIONS

This direct waste analysis Study was conducted at six Recycling and Disposal Facilities (RDFs) in the Regional District of North Okanagan between May 9 and June 18, 2005. A total of 131 waste samples were collected and analyzed; the source of each waste sample was classified as Commercial from Industrial, Commercial and Institutional (ICI) sources, Commercial from Residential sources, Commercial ICI and Residential mix, Self-haul Residential or Self-Haul ICI. Each waste sample was weighed and sorted into 14 primary categories and 63 secondary categories. The mass of each category was recorded and used to calculate the sample composition.

The primary category with the highest mean composition was Organic waste for all RDFs, the mean composition ranging from 27.3% for waste sampled at the Cherryville RDF to 61.1% for waste sampled at the Silver Star RDF. Based on a comparison with the 1998 survey³, the organic fraction of waste generated by the RDNO appears to have remained relatively constant.

The primary category showing the next highest composition at all RDF sites (with the exception of the Armstrong/Spallumcheen RDF) was the Construction materials category, ranging in mean composition from 6.4% at the Silver Star RDF to 21.5% at Kingfisher RDF. This represents a slight increase in the Construction material category composition since 1998. At the Armstrong/Spallumcheen RDF, the second highest mean composition was attributed to the Paper category, comprising 11.8% of the total sorted waste.

The general trend in mean composition from the remainder of the primary waste categories consists of the Paper, Plastic, Glass and Metals categories, which is consistent with the 1998 data. Collectively, these four categories comprise a mean composition ranging from approximately 19.2% at the Silver Star RDF to 35% at the Armstrong/Spallumcheen RDF.

The variability in the waste sort data sets (as measured by the standard deviation) can be attributed to several factors including the lack of an adequate number of samples, and a restricted sampling period. Application of the Kolmogorov-Smirnov goodness of fit test to the larger data sets from the Greater Vernon and Armstrong/Spallumcheen RDFs indicates that the Paper, Glass, Plastic, Organic, and Textile primary category compositions are generally normally distributed.

5 RECOMMENDATIONS

5.1 Waste Reduction Opportunities

During the execution of the Study several waste reduction opportunities were identified, as described in the following recommendations:

1. Reduce the quantity of compostable and recyclable material delivered to the RDFs

In keeping with the objectives of the RDNO Waste Management Plan Update (2002), several primary waste categories should be targeted for continued diversion and / or reduction programs. The results of this Study are consistent with the 1998 waste composition study and indicate that diversion of organics from the waste stream represents the single most significant avenue for reduction of waste entering the RDNO landfill facilities. Existing education and demonstration projects encouraging composting should be continued and / or supplemented with additional programs under the auspices of the RDNO Waste Management Education and Communication Plan.

Diversion of construction materials, paper, plastic, glass and metals, while comprising a significantly smaller component of landfill inputs, also provides an opportunity for waste reduction since most of these waste components are already the subject of RDNO – wide recycling initiatives (e.g. Blue Bag Program). Expansion of the recycling programs to underserviced areas and a continuation of the education campaign are recommended.

2. Reduce the quantity of usable items delivered to the RDFs

Qualitative observations made by the sort supervisor indicate that self-haul loads delivered to the RDFs include a significant quantity of items which are still in working condition. Such items could be diverted from the landfills.

At the Lumby RDF there is a small area where customers can leave objects that are still usable. Based on informal discussions with site users, it became apparent that many customers are not aware of this area. The deposition of reusable goods may be increased if the area is enlarged and signage indicating the purpose of the area is posted. The Greater Vernon and Armstrong/Spallumcheen RDFs do not include drop-off areas for reusable goods. The amount of material entering these landfills may be decreased by creating such areas.

Additionally, contact information for charitable organizations which collect second-hand goods could be posted at the RDFs and on the RDNO website. This may also reduce the volume of usable goods delivered to the RDNO landfills.

5.2 Suggestions for Future Waste Composition Studies

The waste analysis method adopted for this Study was effective. The samples were sorted in a safe and efficient manner, yielding a large quantity of useful data.

One obstacle encountered during the sorting component of this Study was sample acquisition. At each site it took a considerable amount of time and effort to communicate the needs of the sorting crew to the landfill employees. The administrative aspects of future waste composition studies could be improved by alerting landfill employees to the needs of the sort crews, meeting with the landfill site supervisor prior to the beginning the sort to describe the overall process and the function of the landfill employees in the waste composition Study and ensuring that a sufficient number of waste samples are available for the sort crew to continue waste characterization during times of low traffic to the landfills.

6 CLOSURE AND PROFESSIONAL STATEMENT

Technology Resource Inc. prepared the foregoing report for the exclusive use and information of the Regional District of North Okanagan. The information and data were collected and compiled in accordance with the general level of care and skill normally exercised by environmental science and engineering professionals practicing under similar circumstances. During the preparation of this report, TRI has relied on reports, data, studies, specifications, documents and other information provided by others. TRI has taken care to verify the information provided where possible, but makes no warranty as to the accuracy of the reports, data, studies, specifications, documents and other information prepared by others and accepts no responsibility for information contained in them.

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Wendy Lepper, C. Tech.
Sort Supervisor



Christine Woodhouse, M.A.Sc., EIT
Junior Engineer



Rob Fogal, P. Geo.
Project Manager

TABLES

Table 4 Mean Primary Category Compositions for the GVL

Primary Category	Comm ICI (N=32)		Comm Res (N=33)		Comm ICI/Res (N=5)		S-H ICI (N=1)		S-H Res (N=19)		TOTAL (N=90)							
	Composition		Total Sorted Mass (kg)	Composition	Total Sorted Mass (kg)	Composition	Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition							
	Mean	(+/-)						Mean	(+/-)		Mean	(+/-)						
Paper	9.70%	9.45%	435.86	9.96%	5.85%	469.94	15.00%	6.18%	106.38	0.00%	-	0	6.35%	7.35%	171.45	9.27%	7.81%	1183.63
Glass	1.91%	4.29%	86.08	2.04%	1.99%	96.04	2.29%	3.18%	16.04	15.32%	-	21.86	1.88%	2.41%	50.6	2.12%	3.38%	270.62
Metals	3.02%	3.90%	135.77	2.88%	3.21%	136.75	2.06%	1.16%	14.64	9.69%	-	13.82	4.28%	6.06%	116.09	3.26%	4.16%	417.07
Plastic	8.01%	9.27%	358.85	7.45%	4.02%	350.884	9.11%	3.83%	65.01	10.13%	-	14.46	6.81%	8.02%	184.01	7.64%	7.06%	973.21
Leather	0.34%	0.91%	15.32	0.13%	0.20%	6.04	0.98%	1.13%	6.98	0.00%	-	0	0.01%	0.03%	0.24	0.22%	0.64%	28.58
Rubber	1.35%	2.47%	62.34	1.92%	3.52%	92.28	0.48%	0.44%	3.56	0.00%	-	0	2.80%	7.50%	74.4	1.80%	4.29%	232.58
Organic	54.41%	29.78%	2446.01	53.33%	18.25%	2522.08	42.52%	9.38%	303.62	12.40%	-	17.7	39.96%	28.15%	1079.77	49.84%	25.39%	6369.18
Brown Goods	1.66%	5.00%	74.26	1.68%	3.76%	78.34	0.40%	0.76%	2.87	19.52%	-	27.86	3.38%	12.16%	92.24	2.16%	6.91%	275.57
Bulky Goods	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	-	0	1.77%	6.67%	47.45	0.37%	3.09%	47.45
Textiles	2.78%	4.55%	125.54	4.01%	3.25%	187.91	8.03%	13.42%	57.44	3.43%	-	4.9	3.02%	3.75%	81.54	3.58%	4.84%	457.33
Construction	9.82%	20.33%	446.66	7.89%	15.35%	369.01	4.13%	8.77%	31.67	27.66%	-	39.47	22.07%	35.05%	614.55	11.58%	22.72%	1501.36
Residue	0.54%	0.77%	24.25	0.85%	0.59%	40.28	0.75%	0.26%	5.42	0.00%	-	0	0.40%	0.78%	10.9	0.63%	0.71%	80.85
Hazardous	6.23%	11.02%	292.67	6.75%	10.06%	323.4	13.70%	9.38%	98.83	0.00%	-	0	5.82%	6.93%	157.61	6.68%	9.79%	872.51
Other	0.00%	0.00%	0	0.02%	0.13%	1.09	0.00%	0.00%	0	0.00%	-	0	0.18%	0.71%	4.98	0.05%	0.34%	6.07

Table 5 Mean primary category compositions for the AL

Primary Category	Comm ICI (N=3)			Comm Res (N=8)			Comm ICI/Res (N=3)			S-H ICI (N=1)			S-H Res (N=9)			Total (N=24)		
	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)
	Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)	
Paper	9.89%	2.65%	34.63	16.99%	8.88%	177.24	13.70%	2.79%	59.44	7.04%	-	10.27	7.89%	5.86%	91.35	11.87%	7.39%	372.93
Glass	8.86%	5.20%	31.31	2.55%	0.63%	27.06	3.11%	1.15%	13.52	1.39%	-	2.02	3.11%	2.26%	34.17	3.57%	2.95%	108.08
Metals	6.21%	7.05%	21.35	7.41%	7.50%	83.03	9.71%	11.68%	41.83	1.04%	-	1.52	15.68%	18.21%	167.51	10.38%	12.99%	315.24
Plastic	8.52%	0.86%	30.1	12.71%	3.15%	132.71	10.16%	4.35%	43.5	3.11%	-	4.54	9.54%	4.33%	109.58	10.28%	4.02%	320.43
Leather	0.32%	0.55%	1.1	0.15%	0.18%	1.68	0.93%	1.08%	3.86	0.00%	-	0	0.58%	0.56%	7.19	0.42%	0.57%	13.83
Rubber	0.55%	0.42%	1.96	1.35%	1.79%	12.92	0.47%	0.50%	2.02	0.00%	-	0	2.17%	6.11%	26.64	1.39%	3.81%	43.54
Organic	30.75%	12.68%	109.6	33.94%	7.02%	352.42	37.20%	11.59%	162.98	73.56%	-	107.26	29.07%	19.62%	361.01	33.78%	15.96%	1093.27
Brown Goods	6.55%	5.78%	23.62	1.84%	3.98%	22.3	6.21%	8.59%	26.86	0.00%	-	0	13.83%	18.58%	175.88	7.40%	12.80%	248.66
Bulky Goods	0.00%	0.00%	0	0.84%	1.72%	8.43	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.28%	1.03%	8.43
Textiles	9.62%	6.22%	33.44	7.65%	5.12%	79.1	5.52%	5.49%	23.34	1.99%	-	2.9	2.31%	2.11%	28.42	5.39%	4.88%	167.20
Construction	13.05%	7.10%	45.36	2.67%	1.84%	26.96	3.08%	3.18%	13.62	0.00%	-	0	7.79%	10.69%	84.09	5.83%	7.76%	170.03
Residue	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0.00
Hazardous	3.21%	3.41%	11.16	7.17%	6.17%	76.86	7.96%	4.42%	34.03	8.13%	-	11.85	7.19%	6.48%	87.66	6.82%	5.56%	221.56
Other	0.19%	0.32%	0.65	2.09%	1.30%	21.58	0.93%	0.88%	4.09	0.14%	-	0.21	0.76%	0.72%	9	1.13%	1.14%	35.53

Table 6 Mean primary category compositions for the LL

Primary Category	Comm ICI (N=1)			Comm Res (N=2)			S-H Res (N=6)			TOTAL (N=9)		
	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)
	Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)	
Paper	16.75%	-	23.2	22.58%	1.01%	62.52	6.33%	5.15%	56.03	11.10%	8.41%	141.75
Glass	3.72%	-	5.16	2.60%	1.25%	7.19	2.55%	1.98%	22.43	2.69%	1.67%	34.78
Metals	5.76%	-	7.98	2.91%	1.81%	8.07	3.52%	5.48%	31.13	3.64%	4.46%	47.18
Plastic	14.87%	-	20.6	11.32%	6.34%	31.34	7.70%	4.93%	67.94	9.30%	5.20%	119.88
Leather	0.00%	-	0	0.49%	0.69%	1.36	0.04%	0.07%	0.34	0.13%	0.32%	1.70
Rubber	11.16%	-	15.46	0.20%	0.12%	0.56	0.38%	0.62%	3.46	1.54%	3.64%	19.48
Organic	35.47%	-	49.14	40.27%	15.57%	111.46	47.13%	32.40%	405.8	44.31%	26.57%	566.40
Brown Goods	0.00%	-	0	0.34%	0.29%	0.94	4.74%	7.36%	40.66	3.23%	6.24%	41.60
Bulky Goods	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	0.00
Textiles	0.84%	-	1.16	8.03%	0.11%	22.24	2.91%	1.62%	25.28	3.82%	2.80%	48.68
Construction	0.94%	-	1.3	1.95%	0.39%	5.39	16.90%	19.95%	145.74	11.80%	17.53%	152.43
Residue	0.25%	-	0.34	1.34%	0.93%	3.7	0.52%	0.68%	4.6	0.67%	0.74%	8.64
Hazardous	7.10%	-	9.84	8.39%	7.42%	23.25	8.05%	8.70%	71.22	8.02%	7.37%	104.31
Other	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	0.00

Table 7 Mean primary category compositions for the CL

Primary Category	S-H Res (N=3)		
	Composition		Total Sorted Mass (kg)
	Mean	(+/-)	
Paper	7.81%	6.05%	33.08
Glass	10.79%	11.45%	46.04
Metals	2.28%	1.81%	9.63
Plastic	4.99%	1.82%	21.15
Leather	0.37%	0.63%	1.54
Rubber	11.27%	11.56%	47.7
Organic	27.30%	4.43%	115.78
Brown Goods	3.16%	4.65%	13.5
Bulky Goods	2.83%	4.91%	12.12
Textiles	8.54%	9.50%	36.18
Construction	17.09%	14.80%	72.55
Residue	0.24%	0.21%	1
Hazardous	3.32%	2.14%	14.11
Other	0.00%	0.00%	0

Table 8 Mean primary category compositions for the KFT

Primary Category	S-H Res (N=3)		Total Sorted Mass (kg)	
	Composition			
	Mean	(+/-)		
Paper	9.44%	3.72%	39.87	
Glass	4.94%	1.31%	20.94	
Metals	4.34%	1.63%	18.48	
Plastic	15.44%	3.87%	65.48	
Leather	0.28%	0.48%	1.16	
Rubber	0.78%	0.72%	3.3	
Organic	28.50%	4.31%	120.78	
Brown Goods	4.96%	4.06%	21.26	
Bulky Goods	0.00%	0.00%	0	
Textiles	3.37%	2.10%	14.21	
Construction	21.55%	16.77%	92.44	
Residue	0.00%	0.00%	0	
Hazardous	2.14%	1.76%	8.98	
Other	1.27%	0.90%	5.33	

Table 9 Mean primary category compositions for the SST

Primary Category	S-H Res (N=2)		Total Sorted Mass (kg)	
	Composition			
	Mean	(+/-)		
Paper	6.54%	9.24%	16.9	
Glass	4.70%	6.65%	12.16	
Metals	1.30%	1.84%	3.37	
Plastic	6.68%	9.45%	17.27	
Leather	0.00%	0.00%	0	
Rubber	0.03%	0.04%	0.08	
Organic	61.15%	36.83%	178.08	
Brown Goods	0.84%	1.19%	2.18	
Bulky Goods	7.02%	9.93%	18.16	
Textiles	1.30%	1.84%	3.36	
Construction	6.41%	9.06%	19.5	
Residue	0.47%	0.67%	1.22	
Hazardous	5.85%	8.27%	15.12	
Other	0.00%	0.00%	0	

Table 10 Mean Secondary Category Compositions for the GVL

Primary Category	Secondary Category	Comm ICI (N=32)			Comm Res (N=33)			Comm ICI/Res (N=5)			S-H ICI (N=1)			S-H Res (N=19)			TOTAL (N=90)		
		Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		
		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)	
Paper	0 newspaper	1.61%	3.18%	72.26	1.82%	1.65%	85.42	2.26%	2.58%	16.06	0.00%	-	0	0.71%	1.19%	19.16	1.52%	2.31%	192.90
	1 cardboard	1.92%	2.52%	86.82	1.45%	1.35%	68.04	1.11%	0.66%	7.9	0.00%	-	0	1.13%	1.51%	30.28	1.51%	1.87%	193.04
	2 fine / ledger	0.79%	1.31%	35.56	0.52%	0.75%	24.90	1.22%	0.87%	8.7	0.00%	-	0	0.93%	2.00%	24.88	0.73%	1.30%	94.04
	3 glossy	0.74%	1.12%	33.7	1.02%	1.31%	48.18	2.59%	2.67%	18.42	0.00%	-	0	0.82%	1.56%	22.3	0.96%	1.43%	122.6
	4 packaging	0.62%	0.87%	27.98	1.17%	1.03%	54.96	0.91%	0.69%	6.54	0.00%	-	0	0.63%	0.95%	16.98	0.83%	0.96%	106.46
	5 tetra pack	0.15%	0.61%	6.52	0.07%	0.08%	3.26	0.13%	0.20%	0.92	0.00%	-	0	0.03%	0.11%	0.74	0.09%	0.37%	11.44
	6 non-packaging	0.01%	0.03%	0.3	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.02%	0.3
	7 other / multi-material	1.38%	2.41%	61.76	1.12%	0.84%	52.88	1.99%	1.57%	14.02	0.00%	-	0	0.90%	1.82%	24.28	1.20%	1.77%	152.94
	8 contaminated	0.90%	1.52%	40.02	0.70%	0.76%	33.26	0.72%	0.70%	5.14	0.00%	-	0	0.42%	0.59%	11.3	0.71%	1.07%	89.72
	9 tissue / paper toweling	1.58%	2.13%	70.94	2.09%	1.48%	99.04	4.07%	2.95%	28.68	0.00%	-	0	0.80%	1.44%	21.53	1.72%	1.94%	220.19
Glass	10 beverage refundable	0.20%	0.35%	8.83	0.24%	0.41%	11.55	1.18%	2.52%	8.15	0.00%	-	0	0.26%	0.50%	7.14	0.28%	0.70%	35.67
	11 beverage non-refundable	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
	12 food	0.26%	0.47%	11.59	0.88%	0.83%	41.39	0.49%	0.46%	3.48	0.00%	-	0	0.54%	1.17%	14.68	0.56%	0.83%	71.14
	13 other / multi-material	1.30%	4.16%	59.01	0.43%	0.66%	20.07	0.38%	0.36%	2.66	15.32%	-	21.86	0.73%	1.86%	19.63	0.97%	3.06%	123.23
	14 ceramic	0.15%	0.43%	6.65	0.49%	0.95%	23.03	0.25%	0.32%	1.75	0.00%	-	0	0.33%	1.14%	9.15	0.32%	0.82%	40.58
Metals	15 aluminum beverage refundable	0.06%	0.13%	2.72	0.06%	0.08%	2.67	0.15%	0.16%	1.07	0.00%	-	0	0.01%	0.04%	0.39	0.05%	0.10%	6.85
	16 aluminum beverage non-refundable	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
	17 other aluminum	0.48%	2.39%	21.5	0.33%	0.38%	15.44	0.40%	0.41%	2.85	0.00%	-	0	0.09%	0.19%	2.39	0.33%	1.44%	42.18
	18 steel beverage	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
	19 other ferrous	2.20%	2.46%	99.03	2.27%	3.08%	107.65	0.92%	1.06%	6.52	9.69%	-	13.82	3.02%	5.33%	80.89	2.41%	3.49%	307.91
	20 non-ferrous	0.03%	0.18%	1.5	0.10%	0.49%	4.84	0.18%	0.26%	1.28	0.00%	-	0	0.30%	1.13%	8.02	0.12%	0.61%	15.64
	21 other / multi-material	0.24%	0.75%	11.02	0.13%	0.18%	6.15	0.41%	0.36%	2.92	0.00%	-	0	0.86%	3.59%	24.4	0.34%	1.70%	44.49
Plastic	22 PET beverage (#1)	0.11%	0.18%	5.02	0.11%	0.13%	5.38	0.18%	0.12%	1.32	0.00%	-	0	0.10%	0.20%	2.78	0.11%	0.16%	14.5
	23 other PET	0.10%	0.13%	4.4	0.25%	0.21%	11.88	0.16%	0.10%	1.12	0.00%	-	0	0.13%	0.23%	3.5	0.16%	0.19%	20.9
	24 HDPE rigid (#2)	0.63%	0.97%	28.48	0.67%	0.53%	31.56	0.96%	0.80%	6.82	0.00%	-	0	0.67%	0.93%	18.02	0.67%	0.80%	84.88
	25 LDPE rigid (#4)	0.00%	0.01%	0.1	0.08%	0.36%	3.80	1.16%	2.57%	8	0.00%	-	0	0.05%	0.18%	1.36	0.11%	0.65%	13.26
	26 HDPE film (#2)	0.40%	0.60%	18.1	0.50%	0.44%	23.87	0.32%	0.29%	2.3	0.00%	-	0	0.21%	0.26%	5.66	0.39%	0.48%	49.93
	27 LDPE film (#4)	2.40%	2.47%	107.14	1.86%	1.24%	87.90	2.32%	1.80%	16.76	0.00%	-	0	1.22%	2.07%	33.14	1.92%	1.98%	244.94
	28 PVC (#3)	0.21%	0.86%	8.92	0.13%	0.30%	6.28	0.49%	1.06%	3.76	4.82%	-	6.88	0.17%	0.54%	4.64	0.24%	0.80%	30.48
	29 PS (#6)	0.55%	0.71%	24.66	0.73%	0.54%	34.36	0.99%	0.41%	7.08	0.00%	-	0	0.29%	0.36%	7.94	0.58%	0.59%	74.04
	30 PP (#5)	0.29%	0.46%	12.98	0.52%	0.42%	24.32	0.34%	0.28%	2.4	0.00%	-	0	0.17%	0.25%	4.55	0.35%	0.42%	44.25
	31 other plastics	0.84%	1.78%	37.76	0.90%	0.77%	42.07	0.79%	0.72%	5.6	0.00%	-	0	1.06%	1.69%	28.52	0.90%	1.39%	113.954
	32 multi-resin / multi-materials	2.45%	5.27%	110.08	1.64%	2.16%	77.18	1.37%	1.21%	9.64	5.31%	-	7.58	2.72%	4.59%	73.54	2.18%	4.00%	278.02
	33 multi-resin (#7)	0.03%	0.09%	1.21	0.05%	0.12%	2.28	0.03%	0.07%	0.21	0.00%	-	0	0.01%	0.06%	0.36	0.03%	0.09%	4.06

Table 10 Mean Secondary Category Compositions for the GVL

Primary Category	Secondary Category	Comm ICI (N=32)			Comm Res (N=33)			Comm ICI/Res (N=5)			S-H ICI (N=1)			S-H Res (N=19)			TOTAL (N=90)		
		Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		
		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)	
Leather	34 leather	0.34%	0.91%	15.32	0.13%	0.20%	6.04	0.98%	1.13%	6.98	0.00%	-	0	0.01%	0.03%	0.24	0.22%	0.64%	28.58
Rubber	35 used tires	0.31%	1.63%	16.32	0.90%	3.08%	43.54	0.00%	0.00%	0	0.00%	-	0	2.18%	7.13%	58.4	0.90%	3.89%	118.26
	36 other rubber	1.03%	2.01%	46.02	1.02%	1.94%	48.74	0.48%	0.44%	3.56	0.00%	-	0	0.61%	1.54%	16	0.83%	1.73%	114.32
Organic	37 kitchen-animal	0.95%	2.22%	42.74	1.25%	1.22%	58.80	1.65%	1.28%	11.84	0.00%	-	0	1.39%	2.88%	37.56	1.18%	2.02%	150.94
	38 kitchen-vegetable	15.23%	19.25%	687.89	18.79%	11.03%	883.01	28.84%	11.54%	206.7	0.00%	-	0	7.70%	9.44%	207.18	15.53%	15.05%	1984.78
	39 yard waste	1.05%	3.01%	47.21	1.90%	4.13%	88.91	0.00%	0.00%	0	0.00%	-	0	3.17%	8.69%	85.52	1.74%	5.04%	221.64
	40 landscaping	2.95%	5.86%	131.35	22.52%	20.46%	1066.86	9.59%	13.91%	67.66	0.00%	-	0	19.15%	29.50%	522.99	13.88%	20.66%	1788.86
	41 wood	33.86%	39.88%	1520.8	8.60%	19.03%	411.88	2.44%	3.54%	17.42	12.40%	-	17.7	8.55%	13.46%	226.52	17.27%	29.61%	2194.32
	42 other / multi-materials	0.37%	1.58%	16.02	0.28%	1.64%	12.62	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.24%	1.36%	28.64
Brown Goods	43 electrical and electronic appliances and tovs	1.66%	5.00%	74.26	1.68%	3.76%	78.34	0.40%	0.76%	2.87	19.52%	-	27.86	3.38%	12.16%	92.24	2.16%	6.91%	275.57
Bulky Goods	44 office and household furniture	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	1.77%	6.67%	47.45	0.37%	3.09%	47.45
Textiles	45 natural	1.26%	1.97%	57.58	2.32%	2.23%	109.05	1.97%	1.86%	14.24	0.00%	-	0	1.36%	1.89%	36.92	1.70%	2.07%	217.79
	46 synthetic	1.52%	3.19%	67.96	1.69%	2.27%	78.86	6.05%	11.62%	43.2	3.43%	-	4.9	1.66%	2.34%	44.62	1.88%	3.70%	239.54
Construction	47 including renovation and demolition	9.82%	20.33%	446.66	7.89%	15.35%	369.01	4.13%	8.77%	31.67	27.66%	-	39.47	22.07%	35.05%	614.55	11.58%	22.72%	1501.36
Residue	48 small unidentified material and fines	0.54%	0.77%	24.25	0.85%	0.59%	40.28	0.75%	0.26%	5.42	0.00%	-	0	0.40%	0.78%	10.9	0.63%	0.71%	80.85
Hazardous	49 automotive	1.54%	5.07%	69.24	0.12%	0.62%	5.76	0.00%	0.00%	0	0.00%	-	0	1.23%	4.85%	32.96	0.85%	3.78%	107.96
	50 paint / decorative	0.13%	0.40%	5.8	0.07%	0.20%	3.30	0.00%	0.00%	0	0.00%	-	0	0.26%	0.45%	6.96	0.12%	0.34%	16.06
	51 building / woodworking	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
	52 garden / pool / septic	0.45%	1.96%	21.28	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.13%	0.41%	3.55	0.19%	1.19%	24.83
	53 pet / hobby	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
	54 medical	0.06%	0.17%	2.57	0.05%	0.15%	2.16	0.12%	0.17%	0.9	0.00%	-	0	0.04%	0.09%	1.02	0.05%	0.15%	6.65
	55 aerosol	0.10%	0.21%	4.52	0.11%	0.13%	5.07	0.09%	0.09%	0.61	0.00%	-	0	0.06%	0.10%	1.54	0.09%	0.16%	11.74
	56 cosmetics/personal products	0.08%	0.20%	3.59	0.27%	0.39%	12.51	0.15%	0.19%	1.1	0.00%	-	0	0.32%	0.99%	8.73	0.20%	0.53%	25.93
	57 batteries - lead acid (car)	0.00%	0.00%	0	0.08%	0.34%	3.67	0.00%	0.00%	0	0.00%	-	0	0.31%	1.36%	8.59	0.09%	0.65%	12.26
	58 batteries - dry cell	0.03%	0.09%	1.5	0.24%	1.24%	10.98	0.04%	0.05%	0.26	0.00%	-	0	0.10%	0.20%	2.8	0.12%	0.76%	15.54
	59 animal litter	2.61%	8.99%	129.03	2.43%	3.47%	114.45	1.26%	2.65%	9.02	0.00%	-	0	1.68%	4.64%	45.4	2.25%	6.11%	297.9
	60 diapers	1.20%	4.72%	54.22	3.39%	9.84%	165.50	11.99%	8.41%	86.52	0.00%	-	0	1.69%	3.38%	46.06	2.69%	7.36%	352.3
	61 propane tank	0.02%	0.08%	0.92	0.00%	0.00%	0.00	0.05%	0.12%	0.42	0.00%	-	0	0.00%	0.00%	0	0.01%	0.06%	1.34
Other	62 other	0.00%	0.00%	0	0.02%	0.13%	1.09	0.00%	0.00%	0	0.00%	-	0	0.18%	0.71%	4.98	0.05%	0.34%	6.07

Table 11 Mean secondary category compositions for the AL

Primary Category	Secondary Category	Comm ICI (N=3)		Comm Res (N=8)		Comm ICI/Res (N=3)		S-H ICI (N=1)		S-H Res (N=9)		Total (N=24)							
		Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition					
		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)				
Paper	0 newspaper	0.78%	0.84%	2.7	3.09%	2.84%	32.71	1.63%	1.21%	7.12	1.52%	-	2.22	1.13%	1.76%	12.59	1.82%	2.15%	57.34
	1 cardboard	4.25%	1.71%	14.94	2.44%	1.06%	24.59	2.37%	1.03%	10.3	3.50%	-	5.11	2.09%	1.81%	25.15	2.57%	1.53%	80.09
	2 fine / ledger	0.79%	0.86%	2.86	2.03%	2.29%	21.01	2.36%	0.31%	10.32	0.15%	-	0.22	1.08%	1.54%	12.32	1.48%	1.70%	46.73
	3 glossy	0.70%	1.03%	2.38	1.82%	1.93%	19.74	1.29%	1.33%	5.82	0.30%	-	0.44	0.26%	0.27%	3.06	0.96%	1.37%	31.44
	4 packaging	0.30%	0.40%	1.04	1.02%	1.33%	12.06	0.97%	0.28%	4.22	0.74%	-	1.08	0.42%	0.44%	5.22	0.69%	0.85%	23.62
	5 tetra pack	0.19%	0.22%	0.67	0.09%	0.16%	0.89	0.04%	0.05%	0.16	0.01%	-	0.02	0.07%	0.16%	0.93	0.09%	0.15%	2.67
	6 non-packaging	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
	7 other / multi-material	2.00%	2.78%	6.98	1.38%	1.74%	14.25	0.71%	1.17%	2.9	0.23%	-	0.34	1.02%	0.84%	11.16	1.19%	1.46%	35.63
	8 contaminated	0.00%	0.00%	0	1.38%	1.22%	14.03	1.06%	1.25%	4.4	0.00%	-	0	0.08%	0.08%	0.99	0.62%	1.00%	19.42
	9 tissue / paper toweling	0.88%	0.45%	3.06	3.75%	1.87%	37.96	3.28%	0.84%	14.2	0.58%	-	0.84	1.72%	1.79%	19.93	2.44%	1.90%	75.99
Glass	10 beverage refundable	0.43%	0.75%	1.47	0.14%	0.21%	1.49	0.30%	0.10%	1.31	0.14%	-	0.21	0.28%	0.55%	3.44	0.25%	0.42%	7.92
	11 beverage non-refundable	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
	12 food	0.31%	0.54%	1.08	1.72%	0.85%	17.79	1.31%	0.40%	5.77	1.24%	-	1.81	0.22%	0.50%	2.8	0.91%	0.91%	29.25
	13 other / multi-material	1.34%	1.93%	4.89	0.58%	0.79%	6.48	0.79%	1.20%	3.25	0.00%	-	0	1.86%	2.28%	19.91	1.16%	1.69%	34.53
	14 ceramic	6.78%	4.45%	23.87	0.11%	0.25%	1.30	0.70%	0.86%	3.19	0.00%	-	0	0.74%	1.46%	8.02	1.25%	2.68%	36.38
Metals	15 aluminum beverage refundable	0.11%	0.10%	0.4	0.14%	0.29%	1.52	0.03%	0.03%	0.12	0.01%	-	0.02	0.14%	0.36%	1.7	0.12%	0.27%	3.76
	16 aluminum beverage non-refundable	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.05%	0.14%	0.44	0.02%	0.09%	0.44
	17 other aluminum	0.38%	0.07%	1.34	0.72%	0.96%	6.63	7.88%	11.69%	34.03	0.00%	-	0	0.04%	0.05%	0.42	1.29%	4.33%	42.42
	18 steel beverage	0.00%	0.00%	0	0.00%	0.00%	0.00	0.07%	0.12%	0.28	0.00%	-	0	0.00%	0.00%	0	0.01%	0.04%	0.28
	19 other ferrous	0.30%	0.36%	1.08	2.94%	5.20%	34.43	1.15%	1.00%	4.83	0.85%	-	1.24	7.94%	10.01%	85.93	4.17%	7.27%	127.51
	20 non-ferrous	0.23%	0.33%	0.78	1.65%	3.00%	18.69	0.00%	0.00%	0.01	0.18%	-	0.26	0.41%	0.53%	4.81	0.74%	1.81%	24.55
	21 other / multi-material	5.18%	6.72%	17.75	1.96%	4.30%	21.76	0.58%	0.56%	2.56	0.00%	-	0	7.11%	10.44%	74.21	3.06%	7.08%	116.28
Plastic	22 PET beverage (#1)	0.15%	0.24%	0.5	0.27%	0.43%	3.10	0.12%	0.03%	0.5	0.01%	-	0.02	0.15%	0.19%	1.9	0.18%	0.28%	6.02
	23 other PET	0.22%	0.23%	0.78	0.93%	1.24%	10.35	0.30%	0.12%	1.3	0.08%	-	0.12	0.18%	0.15%	2.15	0.45%	0.78%	14.7
	24 HDPE rigid (#2)	0.89%	1.14%	3.23	1.43%	0.59%	14.79	2.15%	0.88%	9.18	0.80%	-	1.17	1.85%	1.92%	20.08	1.58%	1.32%	48.45
	25 LDPE rigid (#4)	0.36%	0.62%	1.21	0.25%	0.40%	2.78	0.25%	0.43%	1.04	0.96%	-	1.4	0.27%	0.81%	2.68	0.30%	0.59%	9.11
	26 HDPE film (#2)	0.81%	0.42%	2.87	1.11%	1.18%	10.90	0.66%	0.19%	2.86	0.03%	-	0.04	0.40%	0.55%	4.82	0.70%	0.81%	21.49
	27 LDPE film (#4)	1.88%	1.56%	6.48	1.94%	1.35%	19.68	1.55%	0.99%	6.7	0.12%	-	0.18	0.91%	0.76%	11.07	1.42%	1.16%	44.11
	28 PVC (#3)	0.53%	0.81%	1.93	0.03%	0.04%	0.27	0.33%	0.57%	1.34	0.00%	-	0	0.57%	0.86%	6.31	0.33%	0.64%	9.85
	29 PS (#6)	1.23%	0.75%	4.29	1.21%	0.61%	12.18	1.25%	0.40%	5.48	0.53%	-	0.78	0.72%	1.01%	8.02	1.01%	0.77%	30.75
	30 PP (#5)	0.81%	0.69%	2.93	1.69%	1.17%	17.24	1.41%	0.99%	5.98	0.38%	-	0.56	0.64%	0.96%	7.2	1.10%	1.06%	33.91
	31 other plastics	0.00%	0.00%	0	0.42%	0.80%	4.78	0.88%	1.53%	3.6	0.01%	-	0.01	0.23%	0.46%	3	0.34%	0.73%	11.39
	32 multi-resin / multi-materials	1.65%	0.85%	5.88	3.32%	2.57%	35.25	1.07%	0.97%	4.74	0.18%	-	0.26	3.59%	2.62%	42.06	2.80%	2.40%	88.19
	33 multi-resin (#7)	0.00%	0.00%	0	0.12%	0.22%	1.39	0.19%	0.33%	0.78	0.00%	-	0	0.02%	0.04%	0.29	0.07%	0.17%	2.46

Table 11 Mean secondary category compositions for the AL

Primary Category	Secondary Category	Comm ICI (N=3)		Comm Res (N=8)		Comm ICI/Res (N=3)		S-H ICI (N=1)		S-H Res (N=9)		Total (N=24)							
		Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition					
		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)				
Leather	34 leather	0.32%	0.55%	1.1	0.15%	0.18%	1.68	0.93%	1.08%	3.86	0.00%	-	0	0.58%	0.56%	7.19	0.42%	0.57%	13.83
Rubber	35 used tires	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	1.92%	5.76%	23.78	0.72%	3.53%	23.78
	36 other rubber	0.55%	0.42%	1.96	1.35%	1.79%	12.92	0.47%	0.50%	2.02	0.00%	-	0	0.25%	0.41%	2.86	0.67%	1.15%	19.76
Organic	37 kitchen-animal	0.75%	0.67%	2.67	5.55%	6.77%	53.78	2.25%	3.42%	9.26	51.34%	-	74.86	0.78%	0.96%	8.79	4.65%	10.91%	149.36
	38 kitchen-vegetable	15.05%	5.68%	52.8	22.25%	6.86%	234.57	24.76%	12.47%	108.48	22.16%	-	32.32	9.42%	9.86%	113.36	16.85%	10.30%	541.53
	39 yard waste	9.60%	16.63%	35.37	1.87%	3.04%	20.50	0.19%	0.32%	0.76	0.01%	-	0.02	3.20%	9.55%	39.58	3.05%	8.13%	96.23
	40 landscaping	0.42%	0.51%	1.42	1.64%	1.94%	17.60	0.79%	1.32%	3.42	0.00%	-	0	7.58%	12.65%	98.38	3.54%	8.21%	120.82
	41 wood	4.94%	2.74%	17.34	1.83%	2.00%	19.16	9.04%	7.13%	40.34	0.04%	-	0.06	8.10%	13.01%	100.9	5.40%	8.68%	177.8
	42 other / multi-materials	0.00%	0.00%	0	0.80%	2.12%	6.81	0.18%	0.31%	0.72	0.00%	-	0	0.00%	0.00%	0	0.29%	1.23%	7.53
Brown Goods	electrical and electronic appliances and toys	6.55%	5.78%	23.62	1.84%	3.98%	22.30	6.21%	8.59%	26.86	0.00%	-	0	13.83%	18.58%	175.88	7.40%	12.80%	248.66
Bulky Goods	44 office and household furniture	0.00%	0.00%	0	0.84%	1.72%	8.43	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.28%	1.03%	8.43
Textiles	45 natural	8.39%	6.20%	29.18	6.14%	4.45%	63.32	4.53%	4.74%	19.12	0.26%	-	0.38	1.92%	1.72%	23.42	4.39%	4.32%	135.42
	46 synthetic	1.23%	1.01%	4.26	1.51%	1.28%	15.78	1.00%	0.76%	4.22	1.73%	-	2.52	0.39%	0.51%	5	1.00%	1.00%	31.78
Construction	47 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	13.05%	7.10%	45.36	2.67%	1.84%	26.96	3.08%	3.18%	13.62	0.00%	-	0	7.79%	10.69%	84.09	5.83%	7.76%	170.03
Residue	48 small unidentified material and fines	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
Hazardous	49 automotive	1.97%	2.21%	6.84	0.69%	1.40%	7.90	0.12%	0.18%	0.5	0.17%	-	0.25	3.11%	6.92%	37.04	1.67%	4.39%	52.53
	50 paint / decorative	0.00%	0.00%	0	0.04%	0.11%	0.48	1.78%	1.92%	7.82	0.00%	-	0	0.99%	2.29%	12.32	0.61%	1.60%	20.62
	51 building / woodworking	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
	52 garden / pool / septic	0.00%	0.00%	0	0.21%	0.59%	2.00	0.00%	0.00%	0	0.00%	-	0	0.03%	0.08%	0.41	0.08%	0.34%	2.41
	53 pet / hobby	0.00%	0.00%	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
	54 medical	0.09%	0.15%	0.32	0.10%	0.07%	0.99	0.09%	0.15%	0.36	0.09%	-	0.13	0.36%	0.97%	3.67	0.19%	0.59%	5.47
	55 aerosol	0.18%	0.23%	0.6	0.14%	0.09%	1.53	0.12%	0.11%	0.5	0.00%	-	0	0.16%	0.23%	2.05	0.15%	0.16%	4.68
	56 cosmetics/personal products	0.25%	0.37%	0.87	0.16%	0.13%	1.74	0.04%	0.06%	0.18	0.00%	-	0	0.01%	0.01%	0.11	0.09%	0.16%	2.9
	57 batteries - lead acid (car)	0.00%	0.00%	0	0.08%	0.23%	0.69	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.03%	0.13%	0.69
	58 batteries - dry cell	0.00%	0.00%	0.01	0.14%	0.21%	1.34	0.06%	0.05%	0.25	0.00%	-	0	0.06%	0.11%	0.66	0.07%	0.14%	2.26
	59 animal litter	0.71%	0.84%	2.52	2.00%	2.57%	20.06	2.33%	2.56%	10.4	1.24%	-	1.81	1.32%	3.01%	16.63	1.59%	2.46%	51.42
	60 diapers	0.00%	0.00%	0	3.61%	5.66%	40.13	3.44%	5.96%	14.02	6.62%	-	9.66	1.15%	2.86%	14.77	2.34%	4.30%	78.58
	61 propane tank	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	-	0	0.00%	0.00%	0	0.00%	0.00%	0
Other	62 other	0.19%	0.32%	0.65	2.09%	1.30%	21.58	0.93%	0.88%	4.09	0.14%	-	0.21	0.76%	0.72%	9	1.13%	1.14%	35.53

Table 12 Mean secondary category compositions for the LL

Primary Category Secondary Category		Comm ICI (N=1)			Comm Res (N=2)			S-H Res (N=6)			TOTAL (N=9)			
		Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	
		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		
Paper	0	newspaper	3.12%	-	4.32	6.09%	0.25%	16.86	0.55%	1.08%	4.88	2.07%	2.58%	26.06
	1	cardboard	3.22%	-	4.46	0.91%	0.31%	2.52	0.57%	0.56%	5.02	0.94%	0.98%	12.00
	2	fine / ledger	3.34%	-	4.62	2.70%	2.72%	7.48	0.56%	0.94%	5.04	1.35%	1.70%	17.14
	3	glossy	0.40%	-	0.56	3.24%	2.83%	8.98	0.67%	0.59%	5.94	1.21%	1.60%	15.48
	4	packaging	1.14%	-	1.58	3.05%	0.64%	8.44	0.76%	0.64%	6.72	1.31%	1.14%	16.74
	5	tetra pack	0.06%	-	0.08	0.12%	0.02%	0.32	0.21%	0.28%	1.85	0.18%	0.23%	2.25
	6	non-packaging	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
	7	other / multi-material	1.52%	-	2.1	1.37%	1.36%	3.78	1.26%	2.07%	11.34	1.31%	1.71%	17.22
	8	contaminated	0.52%	-	0.72	1.45%	1.28%	4.02	0.67%	0.72%	5.86	0.83%	0.81%	10.60
	9	tissue / paper toweling	3.44%	-	4.76	3.65%	1.71%	10.12	1.06%	0.79%	9.38	1.90%	1.53%	24.26
Glass	10	beverage refundable	1.26%	-	1.75	0.28%	0.39%	0.77	1.28%	1.98%	11.45	1.05%	1.63%	13.97
	11	beverage non-refundable	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
	12	food	2.46%	-	3.41	0.88%	0.44%	2.44	0.63%	0.49%	5.47	0.89%	0.73%	11.32
	13	other / multi-material	0.00%	-	0	0.81%	0.47%	2.25	0.36%	0.58%	3.05	0.42%	0.55%	5.30
	14	ceramic	0.00%	-	0	0.62%	0.88%	1.73	0.28%	0.37%	2.46	0.33%	0.47%	4.19
Metals	15	aluminum beverage refundable	0.12%	-	0.17	0.04%	0.03%	0.12	0.07%	0.06%	0.6	0.07%	0.06%	0.89
	16	aluminum beverage non-refundable	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
	17	other aluminum	0.10%	-	0.14	0.33%	0.17%	0.90	0.12%	0.09%	1.08	0.17%	0.13%	2.12
	18	steel beverage	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
	19	other ferrous	2.95%	-	4.09	2.40%	1.87%	6.65	3.20%	5.44%	28.29	2.99%	4.36%	39.03
	20	non-ferrous	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
	21	other / multi-material	2.58%	-	3.58	0.14%	0.08%	0.40	0.13%	0.08%	1.16	0.41%	0.82%	5.14
Plastic	22	PET beverage (#1)	0.16%	-	0.22	0.10%	0.14%	0.28	0.65%	1.32%	5.78	0.47%	1.08%	6.28
	23	other PET	0.14%	-	0.2	0.47%	0.28%	1.30	0.18%	0.18%	1.6	0.24%	0.21%	3.10
	24	HDPE rigid (#2)	3.78%	-	5.24	2.08%	2.57%	5.76	1.56%	2.10%	13.6	1.93%	2.03%	24.60
	25	LDPE rigid (#4)	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
	26	HDPE film (#2)	0.46%	-	0.64	0.33%	0.01%	0.90	0.43%	0.53%	3.84	0.41%	0.42%	5.38
	27	LDPE film (#4)	5.82%	-	8.06	2.02%	0.67%	5.58	2.13%	1.75%	18.8	2.52%	1.87%	32.44
	28	PVC (#3)	0.04%	-	0.06	0.06%	0.08%	0.16	0.71%	1.72%	6.3	0.49%	1.40%	6.52
	29	PS (#6)	1.49%	-	2.06	2.48%	1.91%	6.86	0.54%	0.51%	4.76	1.08%	1.16%	13.68
	30	PP (#5)	0.13%	-	0.18	0.92%	0.12%	2.56	0.19%	0.17%	1.68	0.35%	0.36%	4.42
	31	other plastics	0.72%	-	1	0.61%	0.06%	1.68	0.59%	0.70%	5.2	0.61%	0.56%	7.88
	32	multi-resin / multi-materials	2.12%	-	2.94	2.22%	2.47%	6.16	0.68%	0.97%	6.06	1.18%	1.38%	15.16
	33	multi-resin (#7)	0.00%	-	0	0.04%	0.04%	0.10	0.04%	0.06%	0.32	0.03%	0.05%	0.42
Leather	34	leather	0.00%	-	0	0.49%	0.69%	1.36	0.04%	0.07%	0.34	0.13%	0.32%	1.70
Rubber	35	used tires	9.15%	-	12.68	0.00%	0.00%	0.00	0.00%	0.00%	0	1.02%	3.05%	12.68
	36	other rubber	2.01%	-	2.78	0.20%	0.12%	0.56	0.38%	0.62%	3.46	0.52%	0.75%	6.80

Table 12 Mean secondary category compositions for the LL

Primary Category	Secondary Category	Comm ICI (N=1)			Comm Res (N=2)			S-H Res (N=6)			TOTAL (N=9)		
		Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)	Composition		Total Sorted Mass (kg)
		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)		Mean	(+/-)	
Organic	37 kitchen-animal	1.36%	-	1.88	1.64%	1.05%	4.54	0.72%	0.87%	6.44	1.00%	0.89%	12.86
	38 kitchen-vegetable	14.39%	-	19.94	26.17%	1.29%	72.46	11.35%	8.33%	100.14	14.98%	9.21%	192.54
	39 yard waste	0.00%	-	0	0.00%	0.00%	0.00	0.20%	0.36%	1.8	0.13%	0.30%	1.80
	40 landscaping	16.50%	-	22.86	12.46%	15.80%	34.46	13.06%	28.02%	109.44	13.31%	22.88%	166.76
	41 wood	3.22%	-	4.46	0.00%	0.00%	0.00	21.79%	29.05%	187.98	14.89%	25.21%	192.44
	42 other / multi-materials	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
Brown Goods	electrical and electronic appliances and toys												
	43	0.00%	-	0	0.34%	0.29%	0.94	4.74%	7.36%	40.66	3.23%	6.24%	41.60
Bulky Goods	44 office and household furniture	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
Textiles	45 natural	0.65%	-	0.9	3.88%	0.66%	10.74	1.42%	1.01%	12.28	1.88%	1.43%	23.92
	46 synthetic	0.19%	-	0.26	4.15%	0.55%	11.50	1.48%	1.28%	13	1.93%	1.68%	24.76
Construction	47 including renovation and demolition waste - gypsum, used lumber, concrete asphalt, brick, rocks and dirt	0.94%	-	1.3	1.95%	0.39%	5.39	16.90%	19.95%	145.74	11.80%	17.53%	152.43
Residue	48 small unidentified material and fines	0.25%	-	0.34	1.34%	0.93%	3.70	0.52%	0.68%	4.6	0.67%	0.74%	8.64
Hazardous	49 automotive	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
	50 paint / decorative	0.00%	-	0	0.00%	0.00%	0.00	1.38%	2.76%	11.66	0.92%	2.29%	11.66
	51 building / woodworking	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
	52 garden / pool / septic	0.00%	-	0	0.00%	0.00%	0.00	0.12%	0.30%	1.02	0.08%	0.24%	1.02
	53 pet / hobby	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
	54 medical	0.00%	-	0	0.07%	0.10%	0.19	0.03%	0.04%	0.25	0.03%	0.05%	0.44
	55 aerosol	0.00%	-	0	0.22%	0.21%	0.60	0.04%	0.07%	0.36	0.08%	0.12%	0.96
	56 cosmetics/personal products	0.05%	-	0.07	0.17%	0.01%	0.48	0.09%	0.12%	0.76	0.10%	0.11%	1.31
	57 batteries - lead acid (car)	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
	58 batteries - dry cell	0.00%	-	0	0.00%	0.00%	0.00	0.06%	0.11%	0.5	0.04%	0.09%	0.50
	59 animal litter	0.59%	-	0.82	4.97%	6.47%	13.78	0.60%	0.96%	5.41	1.57%	3.09%	20.01
	60 diapers	6.46%	-	8.95	2.96%	0.63%	8.20	5.74%	7.92%	51.26	5.20%	6.40%	68.41
	61 propane tank	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00
Other	62 other	0.00%	-	0	0.00%	0.00%	0.00	0.00%	0.00%	0	0.00%	0.00%	0.00

Table 13 Mean secondary category compositions for the CL

Primary Category	Secondary Category	S-H Res (N=3)		
		Composition		Total Sorted Mass (kg)
		Mean	(+/-)	
Paper	0 newspaper	0.20%	0.21%	0.84
	1 cardboard	3.41%	4.68%	14.44
	2 fine / ledger	0.23%	0.35%	0.96
	3 glossy	0.02%	0.03%	0.08
	4 packaging	1.21%	1.18%	5.12
	5 tetra pack	0.03%	0.05%	0.12
	6 non-packaging	0.00%	0.00%	0
	7 other / multi-material	0.55%	0.51%	2.32
	8 contaminated	1.06%	0.53%	4.5
	9 tissue / paper toweling	1.11%	0.42%	4.7
Glass	10 beverage refundable	1.36%	1.26%	5.76
	11 beverage non-refundable	0.00%	0.00%	0
	12 food	0.45%	0.46%	1.9
	13 other / multi-material	8.64%	12.80%	36.9
	14 ceramic	0.35%	0.42%	1.48
Metals	15 aluminum beverage refundable	0.38%	0.45%	1.59
	16 aluminum beverage non-refundable	0.00%	0.00%	0
	17 other aluminum	0.17%	0.12%	0.74
	18 steel beverage	0.00%	0.00%	0
	19 other ferrous	1.65%	1.19%	6.98
	20 non-ferrous	0.00%	0.00%	0
	21 other / multi-material	0.08%	0.07%	0.32
Plastic	22 PET beverage (#1)	0.42%	0.17%	1.78
	23 other PET	0.06%	0.05%	0.24
	24 HDPE rigid (#2)	1.16%	1.29%	4.9
	25 LDPE rigid (#4)	0.00%	0.00%	0
	26 HDPE film (#2)	0.32%	0.42%	1.36
	27 LDPE film (#4)	1.46%	0.66%	6.2
	28 PVC (#3)	0.29%	0.50%	1.22
	29 PS (#6)	0.33%	0.07%	1.38
	30 PP (#5)	0.22%	0.13%	0.92
	31 other plastics	0.38%	0.34%	1.62
	32 multi-resin / multi-materials	0.34%	0.30%	1.44
	33 multi-resin (#7)	0.02%	0.04%	0.09
Leather	34 leather	0.37%	0.63%	1.54
Rubber	35 used tires	4.52%	7.82%	19.16
	36 other rubber	6.75%	5.71%	28.54

Table 13 Mean secondary category compositions for the CL

Primary Category	Secondary Category	S-H Res (N=3)		
		Composition		Total Sorted Mass (kg)
		Mean	(+/-)	
Organic	37 kitchen-animal	1.83%	1.67%	7.76
	38 kitchen-vegetable	12.44%	8.43%	52.68
	39 yard waste	0.00%	0.00%	0
	40 landscaping	0.68%	1.17%	2.9
	41 wood	12.35%	6.06%	52.44
	42 other / multi-materials	0.00%	0.00%	0
Brown Goods	43 electrical and electronic appliances and toys	3.16%	4.65%	13.5
Bulky Goods	44 office and household furniture	2.83%	4.91%	12.12
Textiles	45 natural	1.49%	2.29%	6.26
	46 synthetic	7.06%	9.94%	29.92
Construction	47 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	17.09%	14.80%	72.55
Residue	48 small unidentified material and fines	0.24%	0.21%	1
Hazardous	49 automotive	0.00%	0.00%	0
	50 paint / decorative	0.02%	0.03%	0.08
	51 building / woodworking	0.00%	0.00%	0
	52 garden / pool / septic	0.00%	0.00%	0
	53 pet / hobby	0.00%	0.00%	0
	54 medical	0.12%	0.21%	0.5
	55 aerosol	0.21%	0.18%	0.87
	56 cosmetics/personal products	0.22%	0.15%	0.93
	57 batteries - lead acid (car)	0.00%	0.00%	0
	58 batteries - dry cell	0.00%	0.00%	0
	59 animal litter	2.05%	2.15%	8.71
	60 diapers	0.71%	1.03%	3.02
	61 propane tank	0.00%	0.00%	0
Other	62 other	0.00%	0.00%	0

Table14 Mean secondary category compositions for the KFT

Primary Category	Secondary Category	S-H Res (N=3)		
		Composition		Total Sorted Mass (kg)
		Mean	(+/-)	
Paper	0 newspaper	0.66%	0.48%	2.78
	1 cardboard	1.36%	0.55%	5.76
	2 fine / ledger	0.77%	0.21%	3.26
	3 glossy	1.28%	1.12%	5.38
	4 packaging	1.65%	0.67%	7
	5 tetra pack	0.04%	0.05%	0.16
	6 non-packaging	0.00%	0.00%	0
	7 other / multi-material	1.41%	1.21%	5.92
	8 contaminated	0.33%	0.24%	1.42
	9 tissue / paper toweling	1.86%	0.94%	7.84
Glass	10 beverage refundable	0.92%	0.80%	3.97
	11 beverage non-refundable	0.00%	0.00%	0
	12 food	2.87%	2.00%	12.07
	13 other / multi-material	0.57%	0.78%	2.42
	14 ceramic	0.66%	0.37%	2.83
Metals	15 aluminum beverage refundable	0.21%	0.32%	0.89
	16 aluminum beverage non-refundable	0.00%	0.00%	0
	17 other aluminum	0.11%	0.20%	0.48
	18 steel beverage	0.00%	0.00%	0
	19 other ferrous	1.69%	0.39%	7.15
	20 non-ferrous	1.14%	1.97%	4.97
	21 other / multi-material	1.19%	1.78%	4.99
Plastic	22 PET beverage (#1)	0.30%	0.15%	1.26
	23 other PET	0.72%	0.40%	3.02
	24 HDPE rigid (#2)	3.44%	2.90%	14.77
	25 LDPE rigid (#4)	0.00%	0.00%	0
	26 HDPE film (#2)	1.68%	1.06%	7.06
	27 LDPE film (#4)	2.09%	1.17%	8.8
	28 PVC (#3)	0.42%	0.32%	1.8
	29 PS (#6)	0.80%	0.55%	3.38
	30 PP (#5)	2.11%	1.54%	8.89
	31 other plastics	3.88%	0.92%	16.47
	32 multi-resin / multi-materials	0.00%	0.00%	0
	33 multi-resin (#7)	0.01%	0.01%	0.03

Table14 Mean secondary category compositions for the KFT

Primary Category	Secondary Category	S-H Res (N=3)		
		Composition		Total Sorted Mass (kg)
		Mean	(+/-)	
Leather	34 leather	0.28%	0.48%	1.16
Rubber	35 used tires	0.00%	0.00%	0
	36 other rubber	0.78%	0.72%	3.3
Organic	37 kitchen-animal	2.53%	3.26%	10.58
	38 kitchen-vegetable	22.10%	5.39%	93.55
	39 yard waste	1.37%	1.18%	5.82
	40 landscaping	1.31%	1.91%	5.7
	41 wood	1.19%	1.24%	5.13
	42 other / multi-materials	0.00%	0.00%	0
Brown Goods	electrical and electronic appliances and			
	43 toys	4.96%	4.06%	21.26
Bulky Goods	44 office and household furniture	0.00%	0.00%	0
Textiles	45 natural	2.13%	2.18%	8.91
	46 synthetic	1.24%	0.32%	5.3
Construction	47 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	21.55%	16.77%	92.44
Residue	48 small unidentified material and fines	0.00%	0.00%	0
Hazardous	49 automotive	0.09%	0.15%	0.36
	50 paint / decorative	1.09%	1.16%	4.54
	51 building / woodworking	0.00%	0.00%	0
	52 garden / pool / septic	0.00%	0.00%	0
	53 pet / hobby	0.00%	0.00%	0
	54 medical	0.53%	0.60%	2.23
	55 aerosol	0.08%	0.10%	0.36
	56 cosmetics/personal products	0.10%	0.09%	0.42
	57 batteries - lead acid (car)	0.00%	0.00%	0
	58 batteries - dry cell	0.00%	0.00%	0
	59 animal litter	0.25%	0.44%	1.07
	60 diapers	0.00%	0.00%	0
	61 propane tank	0.00%	0.00%	0
Other	62 other	1.27%	0.90%	5.33

Table 15 Mean secondary category compositions for the SST

Primary Category	Secondary Category	S-H Res (N=2)		
		Composition		Total Sorted Mass (kg)
		Mean	(+/-)	
Paper	0 newspaper	1.12%	1.59%	2.9
	1 cardboard	1.15%	1.63%	2.98
	2 fine / ledger	0.35%	0.49%	0.9
	3 glossy	1.35%	1.91%	3.5
	4 packaging	0.54%	0.77%	1.4
	5 tetra pack	0.19%	0.27%	0.5
	6 non-packaging	0.00%	0.00%	0
	7 other / multi-material	0.43%	0.61%	1.12
	8 contaminated	0.21%	0.30%	0.54
	9 tissue / paper toweling	1.18%	1.67%	3.06
Glass	10 beverage refundable	0.55%	0.77%	1.41
	11 beverage non-refundable	0.00%	0.00%	0
	12 food	0.38%	0.54%	0.99
	13 other / multi-material	1.23%	1.73%	3.17
	14 ceramic	2.55%	3.60%	6.59
Metals	15 aluminum beverage refundable	0.07%	0.10%	0.19
	16 aluminum beverage non-refundable	0.00%	0.00%	0
	17 other aluminum	0.17%	0.25%	0.45
	18 steel beverage	0.00%	0.00%	0
	19 other ferrous	0.50%	0.71%	1.29
	20 non-ferrous	0.44%	0.62%	1.14
	21 other / multi-material	0.12%	0.16%	0.3
Plastic	22 PET beverage (#1)	0.10%	0.14%	0.26
	23 other PET	0.09%	0.13%	0.24
	24 HDPE rigid (#2)	0.32%	0.46%	0.84
	25 LDPE rigid (#4)	0.00%	0.00%	0
	26 HDPE film (#2)	0.21%	0.30%	0.54
	27 LDPE film (#4)	0.76%	1.07%	1.96
	28 PVC (#3)	0.14%	0.20%	0.36
	29 PS (#6)	0.29%	0.42%	0.76
	30 PP (#5)	0.12%	0.18%	0.32
	31 other plastics	4.13%	5.84%	10.68
	32 multi-resin / multi-materials	0.44%	0.62%	1.14
	33 multi-resin (#7)	0.07%	0.09%	0.17

Table 15 Mean secondary category compositions for the SST

Primary Category	Secondary Category	S-H Res (N=2)		
		Composition		Total Sorted Mass (kg)
		Mean	(+/-)	
Leather	34 leather	0.00%	0.00%	0
Rubber	35 used tires	0.00%	0.00%	0
	36 other rubber	0.03%	0.04%	0.08
Organic	37 kitchen-animal	0.43%	0.60%	1.1
	38 kitchen-vegetable	6.79%	9.60%	17.56
	39 yard waste	3.25%	4.59%	8.4
	40 landscaping	0.16%	0.23%	0.42
	41 wood	50.52%	51.86%	150.6
	42 other / multi-materials	0.00%	0.00%	0
Brown Goods	electrical and electronic appliances and			
	43 toys	0.84%	1.19%	2.18
Bulky Goods	44 office and household furniture	7.02%	9.93%	18.16
Textiles	45 natural	0.29%	0.42%	0.76
	46 synthetic	1.01%	1.42%	2.6
Construction	47 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt			
		6.41%	9.06%	19.5
Residue	48 small unidentified material and fines	0.47%	0.67%	1.22
Hazardous	49 automotive	0.02%	0.03%	0.06
	50 paint / decorative	0.00%	0.00%	0
	51 building / woodworking	0.18%	0.25%	0.46
	52 garden / pool / septic	0.00%	0.00%	0
	53 pet / hobby	0.00%	0.00%	0
	54 medical	0.00%	0.00%	0
	55 aerosol	0.25%	0.36%	0.65
	56 cosmetics/personal products	0.04%	0.06%	0.11
	57 batteries - lead acid (car)	0.00%	0.00%	0
	58 batteries - dry cell	0.00%	0.00%	0
	59 animal litter	5.21%	7.37%	13.47
	60 diapers	0.14%	0.20%	0.37
	61 propane tank	0.00%	0.00%	0
Other	62 other	0.00%	0.00%	0

APPENDIX A

Waste Composition Categories



Table A-1 Waste Composition Categories

Primary Category		Secondary Category	Example Where Not Specified
Paper	0	newspaper	
	1	cardboard	
	2	fine / ledger	printer paper
	3	glossy	
	4	packaging	pop can boxes
	5	tetra pack	
	6	non-packaging	
	7	other / multi-material	
	8	contaminated	pizza boxes
	9	tissue / paper toweling	
Glass	10	beverage refundable	juice bottles
	11	beverage non-refundable	
	12	food	spaghetti jars
	13	other / multi-material	light bulbs
	14	ceramic	
Metals	15	aluminum beverage refundable	pop cans
	16	aluminum beverage non-refundable	
	17	other aluminum	
	18	steel beverage	
	19	other ferrous	
	20	non-ferrous	
	21	other / multi-material	staplers
Plastic	22	PET beverage (#1)	pop bottles
	23	other PET	food containers
	24	HDPE rigid (#2)	milk jugs
	25	LDPE rigid (#4)	food containers
	26	HDPE film (#2)	shopping bags
	27	LDPE film (#4)	garbage bags
	28	PVC (#3)	pipes
	29	PS (#6)	styrofoam
	30	PP (#5)	yogurt containers
	31	other plastics	
	32	multi-resin / multi-materials	
	33	multi-resin (#7)	food containers

Table A-1 Waste Composition Categories

Primary Category		Secondary Category	Example Where Not Specified
Leather	34	leather	
Rubber	35	used tires	
	36	other rubber	shoe soles
Organic	37	kitchen-animal	
	38	kitchen-vegetable	
	39	yard waste	grass clippings
	40	landscaping	branches, mulch
	41	wood	
	42	other / multi-materials	
Brown Goods		electrical and electronic appliances and toys	computers
Bulky Goods	44	office and household furniture	
Textiles	45	natural	cotton
	46	synthetic	spandex
Construction	47	including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	
Residue	48	small unidentified material and fines	
Hazardous	49	automotive	
	50	paint / decorative	
	51	building / woodworking	
	52	garden / pool / septic	
	53	pet / hobby	
	54	medical	
	55	aerosol	
	56	cosmetics/personal products	
	57	batteries - lead acid (car)	
	58	batteries - dry cell	
	59	animal litter	
	60	diapers	
	61	propane tank	
Other	62	other	

APPENDIX B

- Raw Sort Data



Raw Sort Data

- *Vernon*



Table B-1 Raw sort data - GVL

Sample ID#	GV-SA1	GV-SA2	GV-SA3	GV-SA4	GV-SA6	GV-SA7	GV-SA8	GV-SA9	GV-SA10
Date	5/18/2005	5/18/2005	5/19/2005	5/19/2005	5/20/2005	5/20/2005	5/20/2005	5/24/2005	5/24/2005
Time	12:50pm	2:38pm	9:22pm	11:20am	10:00am	11:50am	1:50pm	8:20am	10:12am
Weather	S-H Res	S-H ICI Demolition	S-H Res	Cloudy	Sunny	Sunny	Sunny	Sunny	Sunny
Load Source				Comm Res	Comm ICI	Comm Res	Comm Res	Comm ICI	Comm ICI
Comments									
Moisture (1 = dry, 5 = wet)									
Load Mass (kg)									
Sample Mass (kg)	143.32	142.69	140	8600	11660	0	2357	9230	2115
Material Mass (kg)	143.32	142.69	141.66	141.4	136.02	143.97	152.78	142.72	134.58
Primary Category	Secondary Category	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)
Paper	0 newspaper	2.92	11.78	0	0	2.46	22.11	1	7.84
	1 cardboard	1.66		0	4.14		1.14	0.4	
	2 fine / ledger	0.56		0	0.04		0.06	5.44	
	3 glossy	0.6		0	0.9		0.02	3.78	
	4 packaging	4.02		0	1.48		1.46	1.9	
	5 tetra pack	0		0	0		0.02	0.6	
	6 non-packaging	0		0	0		0	0	
	7 other / multi-material	0.92		0	2.24		0.46	4.2	
	8 contaminated	0.52		0	2.68		1.24	6.94	
	9 tissue / paper toweling	0.58		0	8.17		2.44	5.68	
	10 blank	0		0	0		0	0	
	11 blank	0		0	0		0	0	
Glass	12 beverage refundable	1.79	5.35	0	21.86	0	1.1	0.77	1.43
	13 beverage non-refundable	0		0	0		0	0	
	14 food	1.87		0	0		0.51	2.75	
	15 other / multi-material	1.69		21.86	0.53		0.15	0.31	
	16 Ceramic	0		0	0.57		0	0.23	
	17 blank	0		0	0		0	1.24	
Metals	18 aluminum beverage refundable	0.27	5.39	0	13.82	0.06	1.58	0.02	3.38
	19 aluminum beverage non-refundable	0		0	0		0	0	
	20 other aluminum	0		0	1.11		0	0	
	21 steel beverage	0		0	0		0	0	
	22 other ferrous	5.06		13.82	0.41		2.7	2.94	
	23 non-ferrous	0		0	0		0	0	
	24 other / multi-material	0.06		0	0		0.66	0.58	
	25 blank	0		0	0		0	0.46	
	26 blank	0		0	0		0	0	
Plastic	27 PET beverage (#1)	0.16	23.33	0	14.46	0.38	9.99	0.2	8.86
	28 other PET	0.4		0	0		0.72	0.2	
	29 HDPE rigid (#2)	1.1		0	2		1.2	0.34	
	30 LDPE rigid (#4)	1.1		0	0		0	0	
	31 HDPE film (#2)	0.46		0	0.46		0.52	0.8	
	32 LDPE film (#4)	12.81		0	2.79		1.56	6.08	
	33 PVC (#3)	0.7		6.88	0		0	0.1	
	34 PS (#6)	1.16		0	1.34		0.74	0.84	
	35 PP (#5)	0.92		0	0.22		1.38	0.62	
	36 other plastics	0.2		0	0		2.54	3.96	
	37 multi-resin / multi-materials	4.32		7.58	2.8		0	8	
	38 multi-resin (#7)	0		0	0		0	1.04	
	39 blank	0		0	0		0	0	

Table B-1 Raw sort data - GVL

Sample ID#	GV-SA1		GV-SA2		GV-SA3		GV-SA4		GV-SA6		GV-SA7		GV-SA8		GV-SA9		GV-SA10		
Date	5/18/2005		5/18/2005		5/19/2005		5/19/2005		5/20/2005		5/20/2005		5/20/2005		5/24/2005		5/24/2005		
Time	12:50pm		2:38pm		9:22pm		11:20am		10:00am		11:50am		1:50pm		8:20am		10:12am		
Weather	S-H Res		S-H ICI Demolition		Sunny		Cloudy		Sunny		Comm Res		Comm Res		Sunny		Sunny		
Load Source					S-H Res		Comm Res		Comm ICI		Comm Res		Comm Res		Comm ICI		Comm ICI		
Comments																			
Moisture (1 = dry, 5 = wet)																			
Load Mass (kg)																			
Sample Mass (kg)	143.32		0	142.69		140	141.66	1	8600	141.4	3	11660	136.02	0	143.97	1	9230	3	
																	2115	134.58	
Primary Category	Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	
Leather	40	Leather	0.06	0.06	0	0	0	0	0	0	0.18	0.18	0	0	3.48	3.48	0.72	0.72	
Rubber	41	used tires	0	0	0	0	0.06	0	1.28	0	1.34	0	0	0	2.6	0	2.92	0	
	42	other rubber	0	0	0	0.06	0	1.28	0	1.34	0	0	0	0	2.6	0	2.92	0	
	43	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	44	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Organic	45	kitchen-animal	0.78	39.64	0	17.7	8.42	51.56	2	77.46	0.4	43.42	0.04	35.2	0	33.26	0.84	45.2	4.04
	46	kitchen-vegetable	9.76	0	0	33.38	0	24.28	0	31.6	0	18.24	0	24.78	0	33.48	0	42.96	0
	47	yard waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.32
	48	landscaping	28.56	0	0	0.46	0	50.06	0	0	0	16.58	0	8.48	0	5.52	0	5.22	0
	49	wood	0.54	17.7	0	9.3	0	1.12	0	0.1	0	0.34	0	0	0	5.36	0	0.34	0
	50	other / multi-materials	0	0	0	0	0	0	0	11.32	0	0	0	0	0	0	0	0	0
	51	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	52	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brown Goods	53	electrical and electronic appliances and toys	0.22	0.22	27.86	27.86	0	0	1.3	1.3	7.17	7.17	0	0	0.05	0.05	0	0	0
Bulky Goods	54	office and household furniture	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	56	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Textiles	57	natural	6.86	13.92	0	4.9	0.98	0.98	0.66	2.8	1.7	5.08	2.12	2.2	3.54	3.56	5.92	8.04	1.24
	58	synthetic	7.06	0	4.9	0	0	2.14	0	3.38	0	0.08	0	0.02	0	2.12	0	0.16	0
Construction	59	including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	22.62	22.62	39.47	39.47	33.94	33.94	16.9	16.9	0.06	0.06	42.89	42.89	0	0	0	0	0
Residue	60	small unidentified material and fines	0.3	0.3	0	0	0	0	0	1.65	1.65	1.43	1.43	2.48	2.48	0.88	0.88	1.16	1.16
Hazardous	61	automotive	0	11.18	0	0	0	13.47	0	14.29	8.82	13.88	0	20.33	0	86.57	0	42.89	0
	62	paint / decorative	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0
	63	building / woodworking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	64	garden / pool / septic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	pet / hobby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	66	medical	0	0	0.35	0	0	0	0	0	0	0	0	0.07	0	0.11	0	0.39	0
	67	aerosol	0.41	0	0.21	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.09
	68	cosmetics/personal products	0.03	0	0	0	0	0.51	0	0	0	0	0	0	0	0.37	0	0.83	0
	69	batteries - lead acid (car)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	70	batteries - dry cell	0.93	0	0.01	0	0.19	0	0	0	11.37	0	0	0	0	0	0	0	0
	71	animal litter	9.81	0	0	0	2.55	0	0	0	0	0	0	0	0	2.71	0	4.53	0
	72	diapers	0	0	12.9	0	11.04	0	4.86	0	8.96	0	86.5	0	38.03	0	3.78	0	0
	73	Propane tank	0	0	0	0	0	0	0	0	0	0	0	0	0.46	0	0	0	0
Other	74	other	4.42	4.42	0	0	0.56	0.56	1.09	1.09	0	0	0	0	0	0	0	0	0
	75	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	76	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total sorted mass (kg)		138.21	138.21	140.07	140.07	135.35	135.35	136.63	136.63	132.81	132.81	140.99	140.99	160.75	160.75	140.07	140.07	141.33	141.33
Net sample mass lost during sorting (kg)		5.11	5.11	2.62	2.62	6.31	6.31	4.77	4.77	3.21	3.21	2.98	2.98	-7.97	-7.97	2.65	2.65	-6.75	-6.75
Percent net sample mass lost during sorting (kg)		3.57%	3.57%	1.84%	1.84%	4.45%	4.45%	3.37%	3.37%	2.36%	2.36%	2.07%	2.07%	-5.22%	-5.22%	1.86%	1.86%	-5.02%	-5.02%
Absolute value of percent net sample mass lost during sorting (kg)		3.57%	3.57%	1.84%	1.84%	4.45%	4.45%	3.37%	3.37%	2.36%	2.36%</								

Sample ID#	GV-SA11	GV-SA12	GV-SA13	GV-SA14	GV-SA15	GV-SA16	GV-SA17	GV-SA18	GV-SA19	GV-SA20
Date	5/24/2005	5/24/2005	5/24/2005	May 35, 2005	5/25/2005	5/25/2005	5/25/2005	5/26/2005	5/26/2005	5/26/2005
Time	12:13pm	2:09pm	3:50pm	8:50am	10:40am	1:10pm	2:50pm	8:42am	9:30am	10:27am
Weather	Sunny	Cloudy	Cloudy	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny
Load Source	S-H Res	Comm ICI	Comm Res	Comm ICI	Comm Res	Comm Res	Comm Res	S-H Res	Comm Res	Comm Res
Comments	Domolition load	Demolition load	Demolition load						(Demolition)	
Moisture (1 = dry, 5 = wet)	1	1	2	4	2	2	2	3	1	1
Load Mass (kg)	106	3205	2355	10380	5515	3950	5005	230	185	255
Sample Mass (kg)	142.78	138.96	143.14	143.62	140.48	144.4	137	141.55	141.3	153.94
Primary Category	Secondary Category	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)
		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)
Paper	0 newspaper	6.52	34.62	0	5.3	0.16	13.64	18.46	44.28	5.32
	1 cardboard	4.34		0		7.96		8		5.22
	2 fine / ledger	0.62		5.3		0.96		1.68		0.1
	3 glossy	5.5		0		0.38		6.28		1.46
	4 packaging	4.52		0		0.4		2.74		3.06
	5 tetra pack	0.02		0		0		0.06		0.04
	6 non-packaging	0		0		0		0		0
	7 other / multi-material	9.42		0		3.52		2.4		2.5
	8 contaminated	2.38		0		0		1.06		0
	9 tissue / paper toweling	1.3		0		0.26		3.6		3.5
	10 blank	0		0		0		0		0
	11 blank	0		0		0		0		0
Glass	12 beverage refundable	0.87	7.59	0	0	0.45	0.7	1.23	3.15	0
	13 beverage non-refundable	0		0		0		0		0
	14 food	0.29		0		0		1.47		4.33
	15 other / multi-material	6.33		0		0.25		0.45		0.83
	16 Ceramic	0.1		0		0		4.79		0.65
	17 blank	0		0		0		0		0
Metals	18 aluminum beverage refundable	0.03	24.82	0	0	0.03	5.83	0.17	7.99	0.09
	19 aluminum beverage non-refundable	0		0		0		0		0
	20 other aluminum	0.23		0		0		0.97		0.28
	21 steel beverage	0		0		0		0		0
	22 other ferrous	24.15		0		5.71		0.79		2.18
	23 non-ferrous	0.05		0		0.07		0		0
	24 other / multi-material	0.36		0		0.02		6.06		0
	25 blank	0		0		0		0		0
	26 blank	0		0		0		0		0
Plastic	27 PET beverage (#1)	0.4	17.29	0	0.82	0.02	7.74	0.26	25.97	0.5
	28 other PET	0.3		0		0.22		0.82		0.72
	29 HDPE rigid (#2)	1.84		0		0.08		2.24		1.82
	30 LDPE rigid (#4)	0		0		0		0		0.06
	31 HDPE film (#2)	0.32		0.1		0.24		0.56		1.06
	32 LDPE film (#4)	2.5		0		0.44		11.26		5.38
	33 PVC (#3)	0		0		0.26		0.38		0.38
	34 PS (#6)	1.46		0		0		0.78		1.64
	35 PP (#5)	0.69		0		0.06		0.38		0.52
	36 other plastics	4.08		0.72		4.2		2.92		0.32
	37 multi-resin / multi-materials	5.7		0		2.22		5.7		3.72
	38 multi-resin (#7)	0		0		0		0.67		0
	39 blank	0		0		0		0		0

Sample ID#	GV-SA11		GV-SA12		GV-SA13		GV-SA14		GV-SA15		GV-SA16		GV-SA17		GV-SA18		GV-SA19		GV-SA20			
Date	5/24/2005		5/24/2005		5/24/2005		May 35, 2005		5/25/2005		5/25/2005		5/26/2005		5/26/2005		5/26/2005		5/26/2005			
Time	12:13pm		2:09pm		3:50pm		8:50am		10:40am		1:10pm		2:50pm		8:42am		9:30am		10:27am			
Weather	Sunny		Cloudy		Cloudy		Sunny															
Load Source	S-H Res		Comm ICI		Comm Res		Comm ICI		Comm Res													
Comments	Demolition load		Demolition load		Demolition load		Demolition load		Demolition load		Demolition load		Demolition load		(Demolition)		(Demolition)		(Demolition)			
Moisture (1 = dry, 5 = wet)	1		1		1		2		4		2		2		2		3		1		1	
Load Mass (kg)	106		3205		2355		10380		5515		3950		5005		230		185		255		153.94	
Sample Mass (kg)	142.78		138.96		143.14		143.62		140.48		144.4		137		141.55		141.3					
Primary Category		Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	
Leather	40	Leather	0	0	0	0	0	0	0	0	0.48	0.48	0	0	0	0	0.52	0.52	0	0	0	
Rubber	41	used tires	0	0.14	0	0	0	0.08	0	0.1	0	0	0.3	0	0.14	0	0.2	0	7.4	22.74	22.74	
	42	other rubber	0.14		0		0.08		0.1		0		0.3		0.14		0.2		7.4		0	
	43	blank	0		0		0		0		0		0		0		0		0		0	
	44	blank	0		0		0		0		0		0		0		0		0		0	
Organic	45	kitchen-animal	0.2	30.3	0	52.8	0.08	25.96	0.66	57.93	3.16	67.41	5.9	70.86	3.88	77.21	16.62	75.04	0.38	96.22	0	127.64
	46	kitchen-vegetable	8.48		0		8.18		53.65		39.2		40.02		35.26		19.08		4.58		1.02	
	47	yard waste	0.1		0		0.46		1.64		11.76		22.32		0		0		0		0	
	48	landscaping	17.52		0		0		0		12.7		2.62		36.84		0.1		0.6		0	
	49	wood	4		52.8		17.24		1.98		0.59		0		1.23		39.24		90.66		126.62	
	50	other / multi-materials	0		0		0		0		0		0		0		0		0		0	
	51	blank	0		0		0		0		0		0		0		0		0		0	
	52	blank	0		0		0		0		0		0		0		0		0		0	
Brown Goods	53	electrical and electronic appliances and toys	0.42	0.42	0	0	5.39	5.39	0	0	1.02	1.02	6.21	6.21	3.17	3.17	2.05	2.05	6.08	6.08	0	0
Bulky Goods	54	office and household furniture	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	55	blank	0		0		0		0		0		0		0		0		0		0	
	56	blank	0		0		0		0		0		0		0		0		0		0	
Textiles	57	natural	7.06	12.44	0	0	1.16	1.36	0.96	1	9.7	11.96	13.45	13.97	10.36	11.44	0.76	0.84	3.72	5.08	2.48	2.48
	58	synthetic	5.38		0		0.2		0.04		2.26		0.52		1.08		0.08		1.36		0	
Construction	59	including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	1.5	1.5	79.36	79.36	79.51	79.51	0.19	0.19	0	0	4.06	4.06	8.95	8.95	8.38	8.38	0	0	0.13	0.13
Residue	60	small unidentified material and fines	3.62	3.62	0	0	1.38	1.38	4.1	4.1	1.44	1.44	1.78	1.78	1.42	1.42	0.18	0.18	0.74	0.74	0	0
Hazardous	61	automotive	0	4.18	0	0	0	1.21	0	3.72	0	11.53	0.08	6.26	0	3.09	0	0.94	0	18.9	0	0
	62	paint / decorative	1.52		0		0.02		0		0.12		0.02		0		0		0		0	
	63	building / woodworking	0		0		0		0		0		0		0		0		0		0	
	64	garden / pool / septic	1.43		0		0		0		0		0		0		0		0		0	
	65	pet / hobby	0		0		0		0		0		0		0		0		0		0	
	66	medical	0.07		0		0.02		0.47		0.03		0		0		0		0.21		0	
	67	aerosol	0		0		0.11		0.11		0.03		0.45		0.13		0		0		0	
	68	cosmetics/personal products	0.65		0		0.01		0.29		0.35		0.07		0.17		0.05		0.13		0	
	69	batteries - lead acid (car)	0		0		0		0		0		0		0		0		0		0	
	70	batteries - dry cell	0.32		0		0		0		2.85		0		0		0.04		0		0	
	71	animal litter	0.19		0		0		1.05		0		11		5.64		0		2.75		18.56	
	72	diapers	0		0		0		0		0		0		0		0.89		0		0	
	73	Propane tank	0		0		0		0		0		0		0		0		0		0	
Other	74	other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	75	blank	0		0		0		0		0		0		0		0		0		0	
	76	blank	0		0		0		0		0		0		0		0		0		0	
Total sorted mass (kg)	136.92	136.92	138.28	138.28	142.8	142.8	148.43	148.43	143.18	143.18	141.95	141.95	133.01	133.01	147.85	147.85	142.69	142.69	155.32	155.32		
Net sample mass lost during sorting																						

Sample ID#	GV-SA21	GV-SA22	GV-SA23	GV-SA24	GV-SA25	GV-SA26	GV-SA27	GV-SA28	GV-SA29	GV-SA30	GV-SA31
Date	5/26/2005	5/26/2005	5/26/2006	5/27/2005	5/27/2005	5/27/2005	5/30/2005	5/30/2005	5/30/2005	5/30/2005	5/30/2005
Time	11:20am	12:40pm	2:00pm	8:20am	12:00pm	1:30pm	8:25am	9:30am	11:00am	12:20pm	2:10pm
Weather	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny
Load Source	Comm Res	Comm Res	Comm ICI	Comm ICI	Comm ICI	Comm ICI	Comm Res	Comm ICI	Comm Res	Comm ICI	Comm Res
Comments											
Moisture (1 = dry, 5 = wet)	1	5	1	2	1	2	4	2	2	3	1
Load Mass (kg)	1575	4055	6970	8825	5815	5585	11105	2580	2945	2310	445
Sample Mass (kg)	134.34	145.38	139.19	139.12	139.8	149.36	145.47	143.72	141.24	140.14	145.84
Primary Category	Secondary Category	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)
Paper	0 newspaper	0.02	1.6	6.58	22.48	0.12	28.18	0.22	13.04	0.32	15.36
	1 cardboard	0		1.36		3.36		1.16		3.28	
	2 fine / ledger	0.4		0.9		0.26		0.28		0.4	
	3 glossy	0.36		3.34		5.2		1.02		0.82	
	4 packaging	0.18		4.08		1.06		3.1		1.68	
	5 tetra pack	0		0		0.02		4.84		0.02	
	6 non-packaging	0		0		0		0		0	
	7 other / multi-material	0.14		1.18		17.06		1.48		0	
	8 contaminated	0.02		0		0		0.04		3.16	
	9 tissue / paper toweling	0.48		5.04		1.1		0.9		5.68	
	10 blank	0		0		0		0		2.84	
	11 blank	0		0		0		0		6.98	
Glass	12 beverage refundable	0	4.33	0	0.76	0.53	5.27	0.01	0.72	0	0.31
	13 beverage non-refundable	0		0		0		0		0	
	14 food	0.27		0.63		0		0		0	
	15 other / multi-material	3.19		0.13		3.75		0.43		0	
	16 Ceramic	0.87		0		0.99		0.28		0	
	17 blank	0		0		0		0		0	
Metals	18 aluminum beverage refundable	0	3.12	0.21	2.27	0.25	5.81	0	2.16	0	27.05
	19 aluminum beverage non-refundable	0		0		0		0		0	
	20 other aluminum	0.16		0.32		0.12		0		18.96	
	21 steel beverage	0		0		0		0		0	
	22 other ferrous	2.96		1.74		5.44		2.16		8.09	
	23 non-ferrous	0		0		0		0		3.04	
	24 other / multi-material	0		0		0		0		7.24	
	25 blank	0		0		0		0		1.15	
	26 blank	0		0		0		0		2.1	
Plastic	27 PET beverage (#1)	0	7.76	0.04	10.37	0.84	16.49	0	23.94	0.14	63.6
	28 other PET	0.34		0.52		0.08		0.1		0.02	
	29 HDPE rigid (#2)	0.74		0.44		0		0.34		0.2	
	30 LDPE rigid (#4)	0		0		0.1		0		0.02	
	31 HDPE film (#2)	0.52		1.36		1.3		0.34		0.14	
	32 LDPE film (#4)	1		3.14		3.92		6.36		10.42	
	33 PVC (#3)	0.06		0.14		0		0		0.08	
	34 PS (#6)	0.48		2.54		0.42		1.48		0.72	
	35 PP (#5)	0.86		0.86		0.1		0		0.44	
	36 other plastics	3.32		0.7		0.02		0.96		13.44	
	37 multi-resin / multi-materials	0.44		0.56		9.68		14.36		38.08	
	38 multi-resin (#7)	0		0.07		0.03		0		1.22	
	39 blank	0		0		0		0		9	
		0		0		0		0		0.13	
		0		0		0		0		0.25	
		0		0		0		0		0	
		0		0		0		0		0	
		0		0		0		0		0	

Sample ID#		
Date		
Time		
Weather		
Load Source		
Comments		
Moisture (1 = dry, 5 = wet)		
Load Mass (kg)		
Sample Mass (kg)		
Primary Category		Primary Category Mass (kg)
Secondary Category		
Paper	0 newspaper	18.08
	1 cardboard	
	2 fine / ledger	
	3 glossy	
	4 packaging	
	5 tetra pack	
	6 non-packaging	
	7 other / multi-material	
	8 contaminated	
	9 tissue / paper toweling	
	10 blank	
	11 blank	
Glass	12 beverage refundable	11.34
	13 beverage non-refundable	
	14 food	
	15 other / multi-material	
	16 Ceramic	
	17 blank	
Metals	18 aluminum beverage refundable	4.58
	19 aluminum beverage non-refundable	
	20 other aluminum	
	21 steel beverage	
	22 other ferrous	
	23 non-ferrous	
	24 other / multi-material	
	25 blank	
	26 blank	
Plastic	27 PET beverage (#1)	14.24
	28 other PET	
	29 HDPE rigid (#2)	
	30 LDPE rigid (#4)	
	31 HDPE film (#2)	
	32 LDPE film (#4)	
	33 PVC (#3)	
	34 PS (#6)	
	35 PP (#5)	
	36 other plastics	
	37 multi-resin / multi-materials	
	38 multi-resin (#7)	
	39 blank	

Sample ID#		
Date		
Time		
Weather		
Load Source		
Comments		
Moisture (1 = dry, 5 = wet)		
Load Mass (kg)		
Sample Mass (kg)		
Primary Category	Secondary Category	Primary Category Mass (kg)
Leather	40 Leather	0
Rubber	41 used tires	0.24
	42 other rubber	
	43 blank	
	44 blank	
Organic	45 kitchen-animal	43.43
	46 kitchen-vegetable	
	47 yard waste	
	48 landscaping	
	49 wood	
	50 other / multi-materials	
	51 blank	
	52 blank	
Brown Goods	53 electrical and electronic appliances and toys	0.57
Bulky Goods	54 office and household furniture	0
	55 blank	
	56 blank	
Textiles	57 natural	6.94
	58 synthetic	
Construction	59 including renovation and demolition waste - gypsum, used lumber, concrete asphalt, brick, rocks and dirt	38.89
Residue	60 small unidentified material and fines	2.02
Hazardous	61 automotive	0.72
	62 paint / decorative	
	63 building / woodworking	
	64 garden / pool / septic	
	65 pet / hobby	
	66 medical	
	67 aerosol	
	68 cosmetics/personal products	
	69 batteries - lead acid (car)	
	70 batteries - dry cell	
	71 animal litter	
	72 diapers	
	73 Propane tank	
Other	74 other	0
	75 blank	
	76 blank	
Total sorted mass (kg)		141.05
Net sample mass lost during sorting (kg)		4.79
Percent net sample mass lost during sorting (kg)		3.28%
Absolute value of percent net sample mass lost during sorting (kg)		3.28%

Sample ID#	GV-SA32		GV-SA33		GV-SA34		GV-SA35		GV-SA36		GV-SA37		GV-SA38		GV-SA39		GV-SA40		GV-SA41		
Date	5/31/2005		5/31/2005		5/13/2005		5/31/2005		6/1/2005		6/1/2005		6/1/2005		6/1/2005		6/1/2005		6/1/2005		
Time	9:02am		11:00am		12:14pm		2:30pm		8:15am		9:12am		11:00am		12:40pm		2:44pm		3:17pm		
Weather	Cloudy		Cloudy		Rain		Sunny		Rain		Rain		Cloudy		Cloudy		Cloudy		Cloudy		
Load Source	S-H Res		Comm Res		Comm Res		Comm Res		Comm ICI		Comm ICI		Comm Res		Comm Res		Comm Res		Comm Res		
Comments									Demolition												
Moisture (1 = dry, 5 = wet)	1		1		2		3		1		1		4		4		1		1		
Load Mass (kg)	220		5295		5100		6120		1060		6535		4790		7995		1985		3825		
Sample Mass (kg)	148.86		138.24		146.67		138.48		141.16		139.64		138.14		142.38		142.78		145.64		
Primary Category		Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)
Paper	0 newspaper	0	2.18	1.26	12.52	6.2	30.96	3.64	19.76	0	0	2.12	22.36	3.2	13.72	7.6	24.3	0	0	0.22	5.78
	1 cardboard	2		2.6		1.42		2.56		0		5.54		1.3		2.72		0		0.94	
	2 fine / ledger	0		0.76		1.78		0.42		0		0.1		0.4		1.54		0		0.04	
	3 glossy	0		0.26		9.22		1.84		0		0.52		0.64		0.94		0		0.1	
	4 packaging	0		1.8		3		3.4		0		0		2.22		1.96		0		0.72	
	5 tetra pack	0		0.26		0.18		0.34		0		0		0.2		0.12		0		0.02	
	6 non-packaging	0		0		0		0		0		0		0		0		0		0	
	7 other / multi-material	0.06		1.26		3.46		1.84		0		4.26		1.62		4.72		0		0.72	
	8 contaminated	0		1.34		1.28		1.72		0		6.66		1.72		0.8		0		0.56	
	9 tissue / paper toweling	0.12		2.98		4.42		4		0		3.16		2.42		3.9		0		2.46	
	10 blank	0		0		0		0		0		0		0		0		0		0	
	11 blank	0		0		0		0		0		0		0		0		0		0	
Glass	12 beverage refundable	0	0	1.07	4.26	2.49	5.9	0	1.25	0	0	1.18	0.75	2.55	0.63	8.15	0	0	0	2.62	
	13 beverage non-refundable	0		0		0		0		0		0		0		0		0		0	
	14 food	0		3.19		2.45		1.23		0		1.17		0.47		1.49		0		0.65	
	15 other / multi-material	0		0		0.33		0.02		0		0.01		1.28		3.34		0		0	
	16 Ceramic	0		0		0.63		0		0		0		0.05		2.69		0		1.97	
	17 blank	0		0		0		0		0		0		0		0		0		0	
Metals	18 aluminum beverage refundable	0	23.4	0.27	3.53	0.49	16.03	0	4.36	0	0	0.03	9.77	0.01	3.71	0.07	11.28	0	0	0	0.81
	19 aluminum beverage non-refundable	0		0		0		0		0		0		0		0		0		0	
	20 other aluminum	0.02		0.2		1.51		0.32		0		0		2.01		1.83		0		0.32	
	21 steel beverage	0		0		0		0		0		0		0		0		0		0	
	22 other ferrous	0		3.06		13.47		4.04		0		9.46		1.69		8.82		0		0	
	23 non-ferrous	0		0		0		0		0		0		0		0		0		0	
	24 other / multi-material	23.38		0		0.56		0		0		0.28		0		0.56		0		0.49	
	25 blank	0		0		0		0		0		0		0		0		0		0	
	26 blank	0		0		0		0		0		0		0		0		0		0	
Plastic	27 PET beverage (#1)	0	0.66	0.06	18.92	0.52	15.96	0.08	18.34	0	0	0.22	13.22	0.1	11.96	0.36	15.56	0	0	0	5.58
	28 other PET	0		1.18		1.02		0.38		0		0.14		0		0.36		0		0.24	
	29 HDPE rigid (#2)	0		1.32		2.38		1.92		0		0.6		0.26		2.34		0		0.22	
	30 LDPE rigid (#4)	0		0.02		0.4		0		0		0		0		0		0		0	
	31 HDPE film (#2)	0.12		1.08		2.12		1.42		0		0.38		0.68		0.6		0		0.72	
	32 LDPE film (#4)	0.16		5.56		3.88		5.22		0		4.74		3.64		4.04		0		2.1	
	33 PVC (#3)	0		1.66		1.9		0.04		0		0		0		0		0		0	
	34 PS (#6)	0.18		2.88		0.94		0.9		0		0.52		0.84		1.24		0		1.04	
	35 PP (#5)	0.08		0.62		0.52		1.42		0		0.92		0.5		0.78		0		0.7	
	36 other plastics	0		1.28		1.22		1.66		0		0.18		2.94		2.94		0		0.16	
	37 multi-resin / multi-materials	0.12		3.26		1.06		5.3		0		5.52		3		2.9		0		0.4	
	38 multi-resin (#7)	0		0		0		0		0		0		0		0		0		0	
	39 blank	0		0		0		0		0		0		0		0		0		0	

Sample ID#	GV-SA32		GV-SA33		GV-SA34		GV-SA35		GV-SA36		GV-SA37		GV-SA38		GV-SA39		GV-SA40		GV-SA41					
Date	5/31/2005		5/31/2005		5/13/2005		5/31/2005		6/1/2005		6/1/2005		6/1/2005		6/1/2005		6/1/2005		6/1/2005					
Time	9:02am		11:00am		12:14pm		2:30pm		8:15am		9:12am		11:00am		12:40pm		2:44pm		3:17pm					
Weather	Cloudy		Cloudy		Rain		Sunny		Rain		Rain		Cloudy		Cloudy		Cloudy		Cloudy					
Load Source	S-H Res		Comm Res		Comm Res		Comm Res		Comm ICI		Comm ICI		Comm Res		Comm Res		Comm Res		Comm Res					
Comments	Moisture (1 = dry, 5 = wet)																							
Moisture (1 = dry, 5 = wet)	1		1		2		3		1		1		4		4		1		1					
Load Mass (kg)	220		5295		5100		6120		1060		6535		4790		7995		1985		3825					
Sample Mass (kg)	148.86		138.24		146.67		138.48		141.16		139.64		138.14		142.38		142.78		145.64					
Primary Category	Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)				
Leather	40 leather		0	0	0	0	0	0.5	0.5	0	0	0	0	0	0	0.68	0.68	0	0	0	0			
Rubber	41 used tires		0	0	0	0.5	0	5.72	0	1.54	0	0	0	4.34	0	0.04	0	0.12	0	0	1.6			
	42 other rubber		0	0.5	0	5.72	0	1.54	0	0	0	0	0.44	0.04	0	0.12	0	0	0	0	1.6			
	43 blank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	44 blank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Organic	45 kitchen-animal		0	102.78	0.92	96.7	1.18	43.28	4.52	73.98	0	72.88	0.2	60.82	2.48	79.02	3.54	62.46	0	62.66	3.62	126.48		
	46 kitchen-vegetable		6.78	40.3	0	30.58	0	48.32	0	0	0	0	42.7	0	25.72	0	39.78	0	0	0	34.26	0		
	47 yard waste		24.32	5.64	0	0	0	0.38	0	0	0	0	0	0	1.06	0	4.16	0	0	0	0	0		
	48 landscaping		70.72	48.42	0	10.3	0	19.74	0	0	0	0	0.86	0	49.42	0	13.88	0	0	0	88.6	0		
	49 wood		0.96	1.42	0	1.22	0	1.02	0	72.88	0	0	17.06	0	0.34	0	1.1	0	62.66	0	0	0		
	50 other / multi-materials		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	51 blank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	52 blank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Brown Goods	53 electrical and electronic appliances and toys		0	0	0	0	0.21	0.21	0	0	0	0	0	0	1.21	1.21	0	0	0	0	0	0		
Bulky Goods	54 office and household furniture		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	55 blank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	56 blank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Textiles	57 natural		0	0	1.72	2.58	1.02	4.52	4.92	9.76	0	0	5.84	8.12	2.2	15.56	4.38	7.32	0	0	0.26	0.28		
	58 synthetic		0	0.86	0	3.5	0	4.84	0	0	0	0	2.28	0	13.36	0	2.94	0	0	0	0.02	0		
Construction	59 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt		0	0	2.77	2.77	0	0	0	0	68.28	68.28	14.3	14.3	0	0	1	1	80.12	80.12	0	0		
Residue	60 small unidentified material and fines		0	0	0.68	0.68	2.26	2.26	1.4	1.4	0	0	0.68	0.68	0.92	0.92	0	0	0	0	0.8	0.8		
Hazardous	61 automotive		0	14.05	0	0.83	0	19.55	0	5.55	0	0	0	0	3.83	0	6.39	0	6.82	0	0	0.32		
	62 paint / decorative		0	0	0.42	0	0	0	0	0	0	0	0	0	2.52	0	0	0	0	0	0	0		
	63 building / woodworking		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	64 garden / pool / septic		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	65 pet / hobby		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	66 medical		0	0.03	0	1.25	0	0	0	0	0	0	0.01	0	0.04	0	0.05	0	0	0	0	0		
	67 aerosol		0	0.09	0	0.67	0	0.43	0	0	0	0	0	0	0	0	0.05	0	0	0	0.11	0		
	68 cosmetics/personal products		0	0.15	0	0.45	0	0.21	0	0	0	0	0.01	0	0.57	0	0.77	0	0	0	0.01	0		
	69 batteries - lead acid (car)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	70 batteries - dry cell		0	0	0	0.06	0	0.16	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	71 animal litter		0	0	0	13.91	0	4.75	0	0	0	0	0	0	4.07	0	0	0	0	0	0	0		
	72 diapers		14.05	0.14	0	3.21	0	0	0	0	0	0	1.29	0	1.71	0	5.95	0	0	0	0.2	0		
	73 Propane tank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Other	74 other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	75 blank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	76 blank		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total sorted mass (kg)			143.07	143.07	143.29	143.29	144.39	144.39	136.44	136.44	141.16	141.16	138.62	138.62	135.08	135.08	137.69	137.69	142.78	142.78	144.27	144.27		
Net sample mass lost during sorting (kg)			5.79	5.79	-5.05	-5.05	2.28	2.28	2.04	2.04	0	0	1.02	1.02	3.06	3.06	4.69	4.69	0	0	1.37	1.37		
Percent net sample mass lost during sorting (kg)			3.89%	3.89%	-3.65%	-3.65%	1.55%	1.55%	1.47%	1.47%	0.00%	0.00%	0.73%	0.73%	2.22%	2.22%	3.29%	3.29%	0.00%	0.00%	0.94%	0.94%		
Absolute value of percent net sample mass lost during sorting (kg)			3.89%	3.89%	3.65%	3.65%	1.55%	1.55%	1.47%	1.47%	0.00%	0.00%	0.73%	0.73%	2.22%	2.22%	3.29%	3.29%	0.00%	0.00%	0.94%	0.94%		

Sample ID#	GV-SA42		GV-SA43		GV-SA44		GV-SA45		GV-SA46		GV-SA47		GV-SA48		GV-SA49		GV-SA50		GV-SA51		
Date	6/2/2005		6/2/2005		6/2/2005		6/2/2005		6/2/2005		6/2/2005		6/3/2005		6/3/2005		6/3/2005		6/3/2005		
Time	9:00am		10:25am		12:00pm		1:55pm		3:00pm		8:30am		10:30am		11:45am		12:45pm		1:30pm		
Weather	Cloudy		Cloudy		Cloudy		Cloudy		Cloudy		Sunny		Cloudy		Sunny		Cloudy		Cloudy		
Load Source	Comm ICI		Comm ICI		Comm Res		Comm Res		Comm ICI		Comm ICI		Comm ICI		Comm Res		Comm ICI		Comm ICI		
Comments	Construction								Park							Construction					
Moisture (1 = dry, 5 = wet)	1		2		4		4		1		2		2		1		1		1		
Load Mass (kg)	2085		12235		5045		3220		3655		2270		7660		7915		4220		7780		
Sample Mass (kg)	132.98		144.58		141.2		138.46		140.4		142.28		140.42		146.98		147.64		142.91		
Primary Category		Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)
Paper	0 newspaper	0.04	5.98	2.72	10.5	0.68	5.9	3.14	13.78	0	0	3.74	30.94	3.14	17.9	0	0	0	0	2.54	23.88
	1 cardboard	2.04		2.52		1.42		2.02		0		8.52		0.92		0		0		0	1.42
	2 fine / ledger	0.06		0.58		0.02		0.16		0		0.16		0.08		0		0		0	3.32
	3 glossy	0		1.44		0.04		1.48		0		1.58		2.18		0		0		0	8.98
	4 packaging	0.24		0		0.38		1.12		0		5.44		0.92		0		0		0	1.58
	5 tetra pack	0		0.02		0.02		0.2		0		0.1		0.1		0		0		0	0
	6 non-packaging	0		0.26		0		0		0		0		0		0		0		0	0
	7 other / multi-material	1.8		0.82		0.62		1.48		0		1.46		2.8		0		0		0	2.98
	8 contaminated	0.32		0.18		0.7		0.72		0		3.28		1.04		0		0		0	1.04
	9 tissue / paper toweling	1.48		1.96		2.02		3.46		0		6.66		6.72		0		0		0	2.02
	10 blank	0		0		0		0		0		0		0		0		0		0	0
	11 blank	0		0		0		0		0		0		0		0		0		0	0
Glass	12 beverage refundable	0.86	3.89	0	31.91	0	1.68	0.25	2.13	0	0	1.27	2.75	0.11	2.57	0	0	0	0	0.29	1.01
	13 beverage non-refundable	0		0		0		0		0		0		0		0		0		0	0
	14 food	0		0		1.65		0.53		0		0.89		1.97		0		0		0	0.27
	15 other / multi-material	0		31.91		0.03		1.35		0		0.59		0.49		0		0		0	0.45
	16 Ceramic	3.03		0		0		0		0		0		0		0		0		0	0
	17 blank	0		0		0		0		0		0		0		0		0		0	0
Metals	18 aluminum beverage refundable	0.05	3.95	0.05	0.66	0.23	3.11	0.03	2.17	0	2.16	0.17	4.28	0.39	3.75	0	5.16	0	5.02	0.17	4.38
	19 aluminum beverage non-refundable	0		0		0		0		0		0		0		0		0		0	0
	20 other aluminum	0.16		0.08		0		0.44		0		0.47		0.5		0		0		0	1.55
	21 steel beverage	0		0		0		0		0		0		0		0		0		0	0
	22 other ferrous	3.74		0.53		2.64		1.7		2.16		3.12		2.86		3.66		5.02		1.82	
	23 non-ferrous	0		0		0.24		0		0		0		0		1.5		0		0	0
	24 other / multi-material	0		0		0		0		0		0.52		0		0		0		0	0.84
	25 blank	0		0		0		0		0		0		0		0		0		0	0
	26 blank	0		0		0		0		0		0		0		0		0		0	0
Plastic	27 PET beverage (#1)	0.14	17.48	0.1	15.04	0.2	4.7	0.08	8.93	0	1.74	0.24	10.87	0.32	10.25	0	0	0	0.4	0.02	13.75
	28 other PET	0.12		0.12		0.24		0.16		0		0.22		0.16		0		0		0.06	0.4
	29 HDPE rigid (#2)	1.24		4.74		0.2		1.24		0		1.32		0.84		0		0		0	1.98
	30 LDPE rigid (#4)	0		0		0		0.06		0		0		0		0		0		0	0
	31 HDPE film (#2)	0.12		0.1		0.62		0.28		0		0.5		0.2		0		0		0	0.12
	32 LDPE film (#4)	7.68		2.32		1.76		2.86		0		3.72		1.32		0		0		0	6.78
	33 PVC (#3)	6.46		0.38		0		0		1.16		0		0		0		0		0.26	0
	34 PS (#6)	0.32		0.6		0.44		1.3		0.58		2.74		1.32		0		0		0.08	1.34
	35 PP (#5)	1		2.2		0.28		0.72		0		0.4		0.22		0		0		0	0.7
	36 other plastics	0.28		0.7		0.74		1.02		0		0.8		1.38		0		0		0	1.22
	37 multi-resin / multi-materials	0.12		3.78		0.22		1.02		0		0.72		3.66		0		0		0	0.98
	38 multi-resin (#7)	0		0		0		0.19		0		0.21		0.83		0		0		0	0.21
	39 blank	0		0		0		0		0		0		0		0		0		0	0

Sample ID#	GV-SA42		GV-SA43		GV-SA44		GV-SA45		GV-SA46		GV-SA47		GV-SA48		GV-SA49		GV-SA50		GV-SA51			
Date	6/2/2005		6/2/2005		6/2/2005		6/2/2005		6/2/2005		6/2/2005		6/3/2005		6/3/2005		6/3/2005		6/3/2005			
Time	9:00am		10:25am		12:00pm		1:55pm		3:00pm		8:30am		10:30am		11:45am		12:45pm		1:30pm			
Weather	Cloudy		Cloudy		Cloudy		Cloudy		Cloudy		Cloudy		Sunny		Cloudy		Sunny		Cloudy			
Load Source	Comm ICI		Comm ICI		Comm Res		Comm Res		Comm ICI		Comm ICI/Res											
Comments	Construction																					
Moisture (1 = dry, 5 = wet)	1		2		4		4		1		2		2		1		1		1			
Load Mass (kg)	2085		12235		5045		3220		3655		2270		7660		7915		4220		7780			
Sample Mass (kg)	132.98		144.58		141.2		138.46		140.4		142.28		140.42		146.98		147.64		142.91			
Primary Category	Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)		
Leather	40 Leather		0	0	0	0	0	0.08	0.08	0	0	0	0	0	0	0	0	0	0	3.9	3.9	
Rubber	41 used tires		0	0.04	0	2.6	0	0.02	0	0.48	0	0	0	0.06	9.1	12.74	0	7.34	0	0	0.96	
	42 other rubber		0.04		2.6		0.02		0.48		0		0.06		3.64		7.34		0		0.96	
	43 blank		0		0		0		0		0		0		0		0		0		0	
	44 blank		0		0		0		0		0		0		0		0		0		0	
Organic	45 kitchen-animal		0.12	88.55	0	38.94	1.12	91.87	2.26	93.06	0	122.52	0.88	61.15	3.52	65.98	0	29.92	0	144.69	2.34	43.72
	46 kitchen-vegetable		2.02		3.08		28.14		40.56		0		33.02		53.62		0		0		21.24	
	47 yard waste		0.21		0		0		0		0		18.9		6.66		0		0		0	
	48 landscaping		0		0.18		62.42		46.52		0		6.11		0		7.22		0		8.86	
	49 wood		81.5		35.68		0.19		3.72		122.52		2.24		2.18		22.7		144.69		11.28	
	50 other / multi-materials		4.7		0		0		0		0		0		0		0		0		0	
	51 blank		0		0		0		0		0		0		0		0		0		0	
	52 blank		0		0		0		0		0		0		0		0		0		0	
Brown Goods	53 electrical and electronic appliances and toys		0	0	0	0	1.73	1.73	0	0	0	0	0.26	0.26	3.51	3.51	0	0	0	0.24	0.24	
Bulky Goods	54 office and household furniture		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	55 blank		0		0		0		0		0		0		0		0		0		0	
	56 blank		0		0		0		0		0		0		0		0		0		0	
Textiles	57 natural		0.88	0.92	0.46	0.46	2.7	15.36	3.78	5.88	0	0	5.76	6.84	7.74	9.08	0	0	0	0	7.42	45.72
	58 synthetic		0.04		0		12.66		2.1		0		1.08		1.34		0		0		0	38.3
Construction	59 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt		8.94	8.94	0	0	9.06	9.06	0	0	13.92	13.92	0	0	1.2	1.2	104.56	104.56	0	0	0.49	0.49
Residue	60 small unidentified material and fines		0.18	0.18	4.06	4.06	0.74	0.74	4.04	4.04	0	0	1.3	1.3	1.54	1.54	0	0	0	0	0.86	0.86
Hazardous	61 automotive		3.66	3.81	38.4	38.93	4.98	5.82	0.7	6.73	0	0	0	20.42	0	6.79	0	0	0	0	2.05	
	62 paint / decorative		0		0		0		0		0		0		0		0		0		0	
	63 building / woodworking		0		0		0		0		0		0		0		0		0		0	
	64 garden / pool / septic		0		0		0		0		0		0		0		0		0		0	
	65 pet / hobby		0		0		0		0		0		0		0		0		0		0	
	66 medical		0		0		0		0.01		0		0.09		0		0		0		0	
	67 aerosol		0.15		0.53		0.11		0.29</													

Sample ID#	GV-SA52			GV-SA53			GV-SA54			GV-SA55			GV-SA56			GV-SA57			GV-SA58			GV-SA59			GV-SA60			GV-SA61		
Date	6/6/2005			6/6/2005			6/6/2005			6/6/2005			6/6/2005			6/7/2005			6/7/2005			6/17/2005			6/7/2005			6/8/2005		
Time	8:15am			10:15am			11:00am			12:20pm			2:30pm			8:20am			10:15am			12:00am			2:45pm			8:45am		
Weather	Sunny			Cloudy			Cloudy			Sunny			Sunny			Rain			Rain			Rain			Cloudy			S-H Res		
Load Source	Comm ICI/Res			S-H Res			Comm Res			Comm ICI/Res			Comm ICI			Comm ICI/Res			Comm Res			Comm ICI/Res			Comm Res			Comm Res		
Comments																														
Moisture (1 = dry, 5 = wet)	3																													
Load Mass (kg)	12745			210			4645			2940			5105			9470			5035			6760			3340			290		
Sample Mass (kg)	138.54			140.8			153.98			143.28			141.38			138.26			143.18			139.18			154.12			140.08		
Primary Category	Secondary Category			Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	
Paper	0 newspaper	0.96	17.04	0.48	0.82	0.2	8.64	2.92	25.24	2.76	32.68	2.84	28.58	9.52	28.24	3.88	18.54	0.16	5.08	0.74	15.9									
	1 cardboard	0.64		0		0.94		6.72		9.86		2.9		2		3.78		1.04		1.04										
	2 fine / ledger	0.7		0		1.46		0.68		6.24		2.68		0.54		0.46		0.08		0.68										
	3 glossy	0		0.16		0.26		1.18		0.84		3.32		5.86		0.92		0.16		1.78										
	4 packaging	0.2		0.02		0.86		2.66		1.76		1.08		2.82		2.74		0.52		1.72										
	5 tetra pack	0.1		0		0.02		0.06		0		0.68		0.12		0.48		0		0.66										
	6 non-packaging	0		0		0		0		0		0		0		0		0		0		0								
	7 other / multi-material	2.42		0.16		1.48		2.84		1.26		6.32		0.82		1.64		0.84		6.8										
	8 contaminated	0.28		0		0.2		0.86		0.66		0.92		2.7		1.62		0.28		0.7										
	9 tissue / paper toweling	11.74		0		3.22		7.32		9.3		7.84		3.86		3.02		2		1.78										
	10 blank	0		0		0		0		0		0		0		0		0		0		0								
	11 blank	0		0		0		0		0		0		0		0		0		0		0								
Glass	12 beverage refundable	0	1.35	0	0.21	0	1.08	0	5.05	0.41	1.57	7.86	11.03	0	1.57	0.55	3.73	0	0.87	2.25	2.56									
	13 beverage non-refundable	0		0		0		0		0		0		0		0		0		0		0								
	14 food	0		0		0.73		2.95		0.95		1.67		0.81		2.05		0.27		0.31										
	15 other / multi-material	1.35		0		0		0.69		0.21		0.43		0.43		1.13		0.21		0										
	16 Ceramic	0		0.21		0.35		1.41		0		1.07		0.33		0		0.39		0										
	17 blank	0		0		0		0		0		0		0		0		0		0		0								
Metals	18 aluminum beverage refundable	0.05	1.59	0	25.66	0.03	0.84	0.03	5.55	0.11	1.16	0.59	3.38	0.23	4.45	0.11	2.65	0.03	2.29	0	10.83									
	19 aluminum beverage non-refundable	0		0		0		0		0		0		0		0		0		0		0								
	20 other aluminum	0.14		0		0.16		0.52		0.12		0.66		0.34		0.18		0.46		0.1										
	21 steel beverage	0		0		0		0		0		0		0		0		0		0		0								
	22 other ferrous	1.04		25.66		0		4.42		0.83		0		3.66		1.8		1.29		3.72										
	23 non-ferrous	0		0		0.49		0		0		0.79		0		0		0.43		6.89										
	24 other / multi-material	0.36		0		0.16		0.58		0.1		1.34		0.22		0.56		0.08		0.12										
	25 blank	0		0		0		0		0		0		0		0		0		0		0								
	26 blank	0		0		0		0		0		0		0		0		0		0		0								
Plastic	27 PET beverage (#1)	0.16	6.36	0	5.96	0.32	10.82	0.3	18.524	0	10.9	0.36	20.62	0.46	13.46	0.16	10.64	0	6.65	1.12	7.44									
	28 other PET	0.18		0		0.18		0.48		0.56		0.04		0.32		0.32		0.36		0.22										
	29 HDPE rigid (#2)	0.12		0.24		0.92		1.68		1.46		2.94		0.86		0.44	</													

Sample ID#	GV-SA52		GV-SA53		GV-SA54		GV-SA55		GV-SA56		GV-SA57		GV-SA58		GV-SA59		GV-SA60		GV-SA61			
Date	6/6/2005		6/6/2005		6/6/2005		6/6/2005		6/6/2005		6/7/2005		6/7/2005		6/17/2005		6/7/2005		6/8/2005			
Time	8:15am		10:15am		11:00am		12:20pm		2:30pm		8:20am		10:15am		12:00am		2:45pm		8:45am			
Weather	Sunny		Cloudy		Cloudy		Sunny		Sunny		Rain		Rain		Rain		Rain		Cloudy			
Load Source	Comm ICI/Res		S-H Res		Comm ICI/Res		Comm Res		Comm ICI		Comm ICI/Res		Comm Res		Comm ICI/Res		Comm Res		S-H Res			
Comments																				3		
Moisture (1 = dry, 5 = wet)	3																					
Load Mass (kg)	12745		210		4		2		3		4		1		6760		1		290			
Sample Mass (kg)	138.54		140.8		4645		2940		5105		9470		5035		143.18		3340		140.08			
Primary Category	Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)		
Leather	40	Leather	1.76	1.76	0	0	0	0	0.34	0.34	0	0	1.32	1.32	0	0	0.32	0.32	0	0		
Rubber	41	used tires	0	0.74	16.42	16.42	0	1.7	0	0.52	0	0.14	0	0.1	0	0.06	0	0.06	0	0.2	0.378	
	42	other rubber	0.74		0		1.7		0.52		0.14		0.1		0.06		0.06		0.2		3.78	
	43	blank	0		0		0		0		0		0		0		0		0		0	
	44	blank	0		0		0		0		0		0		0		0		0		0	
Organic	45	kitchen-animal	0.08	76.98	0	60.74	1.76	60.12	3.8	62.44	1.68	91.13	2.54	65.28	5.12	57.52	0.58	75.66	1.36	133.86	2.34	52.94
	46	kitchen-vegetable	29.68		0		50.06		39.04		82.1		62.46		43.26		35.08		21.7		33.24	
	47	yard waste	0		0		0		0		7.32		0		0		1.22		0.38		0	
	48	landscaping	47.22		45.76		8.3		6		0		0.14		3.14		35.26		109.74		17.04	
	49	wood	0		14.98		0		13.6		0.03		0.14		6		3.52		0.68		0.32	
	50	other / multi-materials	0		0		0		0		0		0		0		0		0		0	
	51	blank	0		0		0		0		0		0		0		0		0		0	
	52	blank	0		0		0		0		0		0		0		0		0		0	
Brown Goods	53	electrical and electronic appliances and toys	0.11	0.11	0	0	0	0	3.11	3.11	0	0	0	0	2.52	2.52	0	0	0.44	0.44	0.1	0.1
Bulky Goods	54	office and household furniture	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	55	blank	0		0		0		0		0		0		0		0		0		0	
	56	blank	0		0		0		0		0		0		0		0		0		0	
Textiles	57	natural	1.22	1.88	0.16	0.64	2.7	2.7	4.08	6.06	0.98	0.98	0.74	2.18	2.16	4.96	2.08	2.34	1.12	1.12	1.9	12.18
	58	synthetic	0.66		0.48		0		1.98		0		1.44		2.8		0.26		0		0	10.28
Construction	59	including renovation and demolition waste - gypsum, used lumber, concrete asphalt, brick, rocks and dirt					30.5	30.5	4.3	4.3	0	0	0	0	0.68	0.68	1.6	1.6	0.56	0.56	2.92	2.92
Residue	60	small unidentified material and fines	0.52	0.52	0	0	1.38	1.38	1.46	1.46	0.36	0.36	1.44	1.44	1.22	1.22	1.28	1.28	0.22	0.22	0.08	0.08
Hazardous	61	automotive	0	29.12	29.82	29.82	0	29.22	0	8.96	0	0.26	0	8	0	30.44	0	18.07	0	1.69	0	27.29
	62	paint / decorative	0		0		0		0		0		0		0		0		1.52		0	
	63	building / woodworking	0		0		0		0		0		0		0		0		0		0	
	64	garden / pool / septic	0		0		0		0		0		0		0		0		0		0	
	65	pet / hobby	0		0		0		0		0		0		0		0		0		0	
	66	medical	0		0		0.57		0.13		0		0		0.33		0		0		0.41	
	67	aerosol	0		0		0		0.07		0		0.27		0.25		0.25		0		0.17	
	68	cosmetics/personal products	0		0		0.51		1.19		0.05		0.01		0.53		2.77		0.17		0.01	
	69	batteries - lead acid (car)	0		0		0		0.82		0		0		0		0.06		0		0	
	70	batteries - dry cell	0.04		0		0		0		0		0.06		0.16		9.93		0		0.2	
	71	animal litter	0		0		0		6.11		0		0.28		8.59		5.06		0		26.5	
	72	diapers	29.08		0		27.72		0.64		0.21		7.38		20.58		0		0		0	
	73	Propane tank	0		0		0.42		0		0		0		0		0		0		0	
Other	74	other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	75	blank	0		0		0		0		0		0		0		0		0		0	
	76	blank	0		0		0		0		0		0		0		0		0		0	
Total sorted mass (kg)		137.45		137.45		140.27		140.27		147		141.214		141.214		139.52		140.61		146.44		134.57
Net sample mass lost during sorting (kg)		1.09		1.09		0.53		0.53		6.98		2.066		2.066		1.86		-2.35		-3.26		4.61
Percent net sample mass lost during sorting (kg)		0.79%		0.79%		0.38%		0.38%		4.53%		4.53%		4.53%		1.44%		1.44%		-1.70%		3.31%
Absolute value of percent net sample mass lost during sorting (kg)		0.79%		0.79%</																		

Sample ID#	GV-SA62		GV-SA63		GV-SA64		GV-SA65		GV-SA66		GV-SA67		GV-SA68		GV-SA69		GV-SA70		GV-SA71		
Date	6/8/2005		6/8/2005		6/8/2005		6/8/2005		6/9/2005		6/9/2005		6/9/2005		6/9/2005		6/9/2005		6/10/2005		
Time	10:44am		10:45am		11:20am		2:44pm		8:20am		10:50am		1:40pm		11:30am		3:00pm		8:15am		
Weather	Cloudy		Cloudy		Cloudy		Cloudy		Sunny												
Load Source	S-H Res		S-H Res		S-H Res		S-H Res		Comm Res		Comm ICI		Comm Res		Comm Res		Comm Res		Comm Res		
Comments																					
Moisture (1 = dry, 5 = wet)	1		1		1		1		1		1		1		1		2		1		
Load Mass (kg)	450		305		156.08		120		4700		11670		210		2320		5125		370		
Sample Mass (kg)	143.24																		10355		
Primary Category	Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	
Paper	0 newspaper	0	1.86	0	0	0.3	28.7	4.46	15.68	3.9	30.06	0	2.52	2	13.54	2.1	11.72	0	0	1.52	9.82
	1 cardboard	0		0	3.4			3.18		2.08		0.54			0.28		0.32		0		0.76
	2 fine / ledger	1.86		0	10.44			0.48		2.3		0			0.32		0.6		0		0.4
	3 glossy	0		0	8.66			1.12		1.08		0			1.2		1.32		0		0.68
	4 packaging	0		0	1.92			1.3		0.58		0.8			0.68		0.82		0		1.28
	5 tetra pack	0		0	0			0.12		0.12		0			0.14		0.06		0		0
	6 non-packaging	0		0	0			0		0		0			0		0		0		0.04
	7 other / multi-material	0		0	3.04			0.98		9.02		0.36			1.44		1.34		0		1.06
	8 contaminated	0		0	0.04			0.28		5.96		0.12			3.2		1.34		0		1.46
	9 tissue / paper toweling	0		0	0.9			3.76		5.02		0.7			4.28		3.82		0		2.62
	10 blank	0		0	0			0		0		0			0		0		0		0
	11 blank	0		0	0			0		0		0			0		0		0		0
Glass	12 beverage refundable	0	0	0	0	0.17	8.45	0	2.84	0	0.38	0	0	0	0.16	0	5.54	0	0	1.07	1.54
	13 beverage non-refundable	0		0	0			0		0		0			0		0		0		0
	14 food	0		0	0			2.23		0.29		0			0.16		2.51		0		0
	15 other / multi-material	0		0	1.01			0.61		0.09		0			0		3.03		0		0.47
	16 Ceramic	0		0	7.27			0		0		0			0		0		0		0
	17 blank	0		0	0			0		0		0			0		0		0		0
Metals	18 aluminum beverage refundable	0	0	0	0	0	2.13	0	1.4	0.02	5.38	0	0.35	0	24.15	0.09	3.87	0	0.66	0.11	0.97
	19 aluminum beverage non-refundable	0		0	0			0		0		0			0		0		0		0
	20 other aluminum	0		0	0			0.1		0.18		0			0.12		0.48		0		0.1
	21 steel beverage	0		0	0			0		0		0			0		0		0		0
	22 other ferrous	0		0	2.05			1.08		5.02		0.33			23.93		2.44		0.66		0.7
	23 non-ferrous	0		0	0			0		0		0			0		0		0		0
	24 other / multi-material	0		0	0.08			0.22		0.16		0.02			0.1		0.86		0		0.06
	25 blank	0		0	0			0		0		0			0		0		0		0
	26 blank	0		0	0			0		0		0			0		0		0		0
Plastic	27 PET beverage (#1)	0	1.48	0	0	0.06	26.46	0.22	8.64	0.34	26.88	0	7.12	0.04	3.67	0	24.62	0	0	0.06	10.16
	28 other PET	0		0	0	0.02		0.66		0.28		0			0.14		0.2		0		0.24
	29 HDPE rigid (#2)	0		0	2.02			1.52		1.18		0.32			0.3		2.14		0		2.92
	30 LDPE rigid (#4)	0		0	0			0		0		0			0		0		0		0
	31 HDPE film (#2)	0		0	0.28			0.5		2.92		0			0.32		1.1		0		0.08
	32 LDPE film (#4)	1.48		0	1.92			2.3		8.22		1.44			1.28		3.52				

Sample ID#	GV-SA62		GV-SA63		GV-SA64		GV-SA65		GV-SA66		GV-SA67		GV-SA68		GV-SA69		GV-SA70		GV-SA71			
Date	6/8/2005		6/8/2005		6/8/2005		6/8/2005		6/9/2005		6/9/2005		6/9/2005		6/9/2005		6/9/2005		6/10/2005			
Time	10:44am		10:45am		11:20am		2:44pm		8:20am		10:50am		1:40pm		11:30am		3:00pm		8:15am			
Weather	Cloudy		Cloudy		Cloudy		Cloudy		Sunny													
Load Source	S-H Res		S-H Res		S-H Res		S-H Res		Comm Res		Comm ICI		Comm Res		Comm Res		Comm Res		Comm Res			
Comments																						
Moisture (1 = dry, 5 = wet)	1		1		1		1		1		1		1		1		2		1			
Load Mass (kg)	450		305		156.08		120		4700		11670		210		2320		5125		370			
Sample Mass (kg)	143.24																		10355			
Primary Category	Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)		
Leather	40	Leather	0	0	0	0	0.16	0.16	0.62	0.62	0.1	0.1	0	0	0	0	0.34	0.34	0	0	0	
Rubber	41	used tires	0	0	0	0	0.58	0	0	0	0.2	0	0	6.7	0	0.08	0	12.8	0	0.08	0	0.1
	42	other rubber	0	0	0	0	0.58	0	0	0.2	6.7	0	0.08	0	12.8	0	0.08	0	0	0	0.1	
	43	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	44	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Organic	45	kitchen-animal	0	129.56	0	0	1.46	28.7	0.86	88.24	0.78	46.32	0	123.1	5.3	96.18	1.5	70.78	0	0.94	3.68	102.1
	46	kitchen-vegetable	0	0	0	0	2.98	29.24	0	28.28	1.46	0	23.36	0	0	0	15.54	0	0	0	79.32	0
	47	yard waste	0	0	0	0	0	0	0	0.28	23.98	0	0	0	0	0	0	0	0	0	0	0
	48	landscaping	126.96	0	0	0	19.14	0	55.44	0	8.74	0	97.66	0	65.12	0	53.68	0	0	0	18.98	0
	49	wood	2.6	0	0	0	5.12	0	2.7	0	8.24	0	0	0	2.4	0	0.06	0	0.94	0	0.12	0
	50	other / multi-materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	51	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	52	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brown Goods	53	electrical and electronic appliances and toys	3.06	3.06	0	0	8.22	8.22	0	0	5.05	5.05	0	0	0	0.05	0.05	0	0	0	0	1.51
Bulky Goods	54	office and household furniture	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	56	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Textiles	57	natural	0	4.74	0	0	3.62	8.18	1.7	6.32	5.68	7.72	0	0	0	2.06	2.78	1.72	3.78	0	0.26	0.4
	58	synthetic	4.74	0	0	0	4.56	0	4.62	0	2.04	0	0	0	0.72	0	2.06	0	0.26	0	0.46	0
Construction	59	including renovation and demolition waste - gypsum, used lumber, concrete asphalt, brick, rocks and dirt	0	0	156.08	156.08	7.54	7.54	3.07	3.07	7.44	7.44	0.12	0.12	2.7	2.7	0	0	145.58	145.58	0	0
Residue	60	small unidentified material and fines	0	0	0	0	2.54	2.54	0.84	0.84	2.68	2.68	0	0	1.16	1.16	1.76	1.76	0	0	1.2	1.2
Hazardous	61	automotive	0	1.56	0	0	0.2	18.02	0	9.21	2.66	3.95	0	0.09	0	3.82	0	10.71	0	0	0	5.62
	62	paint / decorative	1.56	0	0	0	0	0	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0
	63	building / woodworking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	64	garden / pool / septic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.6
	65	pet / hobby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	66	medical	0	0	0	0	0.03	0	0.04	0	0.21	0	0	0	0	0	0	0	0	0	0	0
	67	aerosol	0	0	0	0	0.45	0	0.45	0	0.55	0	0.09	0	0	0	0.3					

Sample ID#	GV-SA72		GV-SA73		GV-SA74		GV-SA75		GV-SA76		GV-SA77		GV-SA78		GV-SA79		GV-SA80		GV-SA81		
Date	6/10/2005		6/10/2005		6/10/2005		6/10/2005		6/10/2005		6/10/2005		6/14/2005		6/14/2005		6/14/2005		6/14/2005		
Time	9:55am		11:10am		11:30am		1:12am		2:05pm		2:50pm		8:15am		9:44am		12:15pm		1:05pm		
Weather	Sunny		Cloudy		Cloudy		Sunny		Sunny		Sunny		Cloudy		Cloudy		Cloudy		Cloudy		
Load Source	Comm ICI		S-H Res		S-H Res		S-H Res		S-H Res		S-H Res		Comm ICI		Comm Res		Comm Res		Comm ICI		
Comments																					
Moisture (1 = dry, 5 = wet)	1		1		1		1		1		1		1		1		1		1		
Load Mass (kg)	10355		225		270		165		210		275		10250		1295		6940		2140		
Sample Mass (kg)	149.28		138.84		149.8		140.62		143.64		138.22		134.5		141.16		140.34		141.06		
Primary Category	Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	
Paper	0 newspaper	2.32	19.38	0	0	0	0	1.44	2.82	7.56	0.1	6.08	0.64	8.06	8.38	21.92	3.56	9.54	0	0.24	
	1 cardboard	6.08		0	0	0	0	0.46		0.46		0.94		0.36		0.26		0.24			
	2 fine / ledger	3.82		0	0	0	0	0.32		1.18		0.02		1.52		0.02		0			
	3 glossy	1.3		0	0	0	0.04	2.2		1.36		0.48		2.26		3.14		0			
	4 packaging	0.82		0	0	0	0.2	0.28		0.54		0.86		3.38		0.72		0			
	5 tetra pack	0.14		0	0	0	0	0		0		0		0.22		0.06		0			
	6 non-packaging	0		0	0	0	0	0		0		0		0		0		0			
	7 other / multi-material	3.94		0	0	0	0	0.14		0.48		3.32		1.88		0.44		0			
	8 contaminated	0		0	0	0	0.58	0.9		0.68		0.5		1.94		0.16		0			
	9 tissue / paper toweling	0.96		0	0	0	0.62	0.44		1.28		1.3		1.98		1.18		0			
	10 blank	0		0	0	0	0	0		0		0		0		0		0			
	11 blank	0		0	0	0	0	0		0		0		0		0		0			
Glass	12 beverage refundable	0	0.47	0	9.88	0	0	0	0	0.73	0	3.16	1.47	13.56	0.79	5.18	0	1.09	0	0	
	13 beverage non-refundable	0		0	0	0	0	0		0		0		0		0		0			
	14 food	0.47		0	0	0	0	0.73		2.54		1.09		2.63		1.09		0			
	15 other / multi-material	0		9.88	0	0	0	0		0.07		10.55		0.43		0		0			
	16 Ceramic	0		0	0	0	0	0		0.55		0.45		1.33		0		0			
	17 blank	0		0	0	0	0	0		0		0		0		0		0			
Metals	18 aluminum beverage refundable	0.03	0.5	0	5.6	0	0	0.13	0	0.27	0	3.57	0.27	3.12	0.21	4.13	0	0.88	0	11.18	
	19 aluminum beverage non-refundable	0		0	0	0	0	0		0		0		0		0		0			
	20 other aluminum	0.02		0	0	0	0.02	0.02		0.06		0.2		0.8		0.1		0			
	21 steel beverage	0		0	0	0	0	0		0		0		0		0		0			
	22 other ferrous	0.29		5.6	0	0	0.09	0.23		3.47		2.49		2.78		0.7		10.18			
	23 non-ferrous	0		0	0	0	0	0		0		0		0		0		0			
	24 other / multi-material	0.16		0	0	0	0.02	0.02		0.04		0.16		0.34		0.08		1			
	25 blank	0		0	0	0	0	0		0		0		0		0		0			
	26 blank	0		0	0	0	0	0		0		0		0		0		0			
Plastic	27 PET beverage (#1)	0.04	6.2	0	3.08	0	0.76	0	31.82	0	1.52	0.04	7.76	0.16	5.24	0.32	13.86	0	11.22	0	0.84
	28 other PET	0.16		0	0	0	0	0.08		0.56		0		0.6		0.26		0			
	29 HDPE rigid (#2)	0.4		3.08	0	0	4.78	0.06		0.8		0.12		2.28		0.14		0.26			
	30 LDPE rigid (#4)	0		0	0	0	0	0		0		0		0		0		0			
	31 HDPE film (#2)	0.06		0	0	0	0.74	0.16		1.1		0.48		0.64		0.12		0			
	32 LDPE film (#4)	2.54		0	0	0	0.58	0.68		2.28		2.42		2.4</							

Sample ID#	GV-SA72		GV-SA73		GV-SA74		GV-SA75		GV-SA76		GV-SA77		GV-SA78		GV-SA79		GV-SA80		GV-SA81			
Date	6/10/2005		6/10/2005		6/10/2005		6/10/2005		6/10/2005		6/10/2005		6/14/2005		6/14/2005		6/14/2005		6/14/2005			
Time	9:55am		11:10am		11:30am		1:12am		2:05pm		2:50pm		8:15am		9:44am		12:15pm		1:05pm			
Weather	Sunny		Cloudy		Cloudy		Sunny		Sunny		Sunny		Cloudy		Cloudy		Cloudy		Cloudy			
Load Source	Comm ICI		S-H Res		S-H Res		S-H Res		S-H Res		S-H Res		Comm ICI		Comm Res		Comm Res		Comm ICI			
Comments																						
Moisture (1 = dry, 5 = wet)	1		1		1		1		1		1		1		1		1		1			
Load Mass (kg)	10355		225		270		165		210		275		10250		1295		6940		2140			
Sample Mass (kg)	149.28		138.84		149.8		140.62		143.64		138.22		134.5		141.16		140.34		141.06			
Primary Category	Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)		
Leather	40	Leather	0.24	0.24	0	0	0	0	0	0	0	0.02	0.02	0.72	0.72	1.04	1.04	0	0	0	0	
Rubber	41	used tires	1.28	1.32	0	0	0	0	41.46	44.02	0	0	0.22	0	12.94	0	1.08	11.7	11.7	0	0	
	42	other rubber	0.04	0	0	0	0	2.56	0	0	0	0.22	0	12.94	0	1.08	0	0	0	0		
	43	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	44	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Organic	45	kitchen-animal	9.58	102	0	78.12	0	9.94	2.12	9.32	0.34	47.36	2.06	70.74	4.14	54.2	0	61.38	0	42.78	0	127.54
	46	kitchen-vegetable	70.24	32.4	0	0	0	1.64	0	4.9	20.64	0	9.24	0	45.04	0	5.44	0	0	0	0	
	47	yard waste	0	0	0	0	0	0	0	13.26	47.84	0	0	0	0	0	0	0	0	0	0	
	48	landscaping	5.84	9.12	0	0	0	0	12.64	0.08	0	36.64	0	15.76	0	21.12	0	0	0	0	0	
	49	wood	16.34	36.6	0	9.94	0	5.56	16.22	0	0.12	0	4.18	0	0.58	0	16.22	0	127.54	0	0	
	50	other / multi-materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	51	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	52	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Brown Goods	53	electrical and electronic appliances and toys	0	0	0	0	0	0.11	0.11	76.54	76.54	1.03	1.03	0	0	0	15.23	15.23	26.53	26.53	0	0
Bulky Goods	54	office and household furniture	0	0	0	0	0	0	40.72	40.72	6.73	6.73	0	0	0	0	0	0	0	0	0	0
	55	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	56	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Textiles	57	natural	5.74	5.74	0	0	0	3.12	3.54	0	2.34	5.62	13.76	0.64	15.14	4	9.66	2	3.74	0	0.12	
	58	synthetic	0	0	0	0	0	0.42	0	2.34	0	8.14	0	14.5	0	5.66	0	1.74	0	0.12	0	
Construction	59	including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	0	0	42.52	42.52	137.12	137.12	4.02	4.02	0	0	11.28	11.28	9.54	9.54	0.86	0.86	23.4	23.4	0	0
Residue	60	small unidentified material and fines	0.84	0.84	0	0	0	0.34	0.34	0	0	1.02	1.02	0.26	0.26	1.72	1.72	1.82	1.82	0	0	
Hazardous	61	automotive	0	16.13	0	0	0	2.44	4.45	0	0.19	0	13.65	0	14.36	18.06	0	4.21	0	1.67	0	1.14
	62	paint / decorative	0	0	0	0	0	1.38	0	0	0	0	0	0	0	0	0	0	0	0	1.14	
	63	building / woodworking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	64	garden / pool / septic	16	0	0	0	0	0	0	0	0	0	2.12	0	0.68	0	0	0	0	0	0	
	65	pet / hobby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	66	medical	0	0	0	0	0	0.01	0	0	0	0.15	0	0	0	0.25	0	0	0	0	0	
	67	aerosol	0	0	0	0	0	0	0	0	0	0.11	0	1.01	0	0.09	0					

Sample ID#	GV-SA82		GV-SA83		GV-SA84		GV-SA85		GV-SA86		GV-SA87		GV-SA88		GV-SA89		GV-SA90		GV-SA91				
Date	6/6/2005		Date	6/6/2005		Date	6/6/2005		Date	6/6/2005		Date	6/15/2005		Date	6/15/2005		Date	6/15/2005				
Time	12:15pm		Time	1:12pm		Time	1:55pm		Time	3:16pm		Time	4:04pm		Time	8:15am		Time	11:06am				
Weather	Sunny		Weather	Sunny		Weather	Sunny		Weather	Sunny		Weather	Sunny		Weather	Sunny		Weather	Sunny				
Load Source	Comm ICI		Load Source	Comm ICI		Load Source	Comm ICI		Load Source	Comm ICI		Load Source	Comm ICI		Load Source	Comm ICI		Load Source	Comm ICI				
Comments	Demolition		Comments	Demolition		Comments	Demolition		Comments	Demolition		Comments	Demolition		Comments	S-H Res		Comments	S-H Res				
Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1				
Load Mass (kg)	80		Load Mass (kg)	4835		Load Mass (kg)	4490		Load Mass (kg)	4125		Load Mass (kg)	5470		Load Mass (kg)	2080		Load Mass (kg)	200				
Sample Mass (kg)	138		Sample Mass (kg)	138		Sample Mass (kg)	138		Sample Mass (kg)	138		Sample Mass (kg)	137.96		Sample Mass (kg)	143.07		Sample Mass (kg)	134.38		Sample Mass (kg)	145.52	
Primary Category	Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)			
Paper	0 newspaper	0	0	0	0	0	0	0	0	0	0	2.76	29.68	0	0	0	12.76	0.46	8.84	0.38	6.76		
	1 cardboard	0	0	0	0	0	0	0	0	0	0	0.48	0	0	0	5.08	0.86	0.82					
	2 fine / ledger	0	0	0	0	0	0	0	0	0	0	4.1	0	0	0	7.68	1.36	1.92					
	3 glossy	0	0	0	0	0	0	0	0	0	0	1.18	0	0	0	0	0.86	2.48					
	4 packaging	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1.22	0.4					
	5 tetra pack	0	0	0	0	0	0	0	0	0	0	0.22	0	0	0	0	0.06	0					
	6 non-packaging	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	7 other / multi-material	0	0	0	0	0	0	0	0	0	0	2.14	0	0	0	0	0.58	0.22					
	8 contaminated	0	0	0	0	0	0	0	0	0	0	5.26	0	0	0	0	1.7	0.36					
	9 tissue / paper toweling	0	0	0	0	0	0	0	0	0	0	11.54	0	0	0	0	1.74	0.18					
	10 blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	11 blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Glass	12 beverage refundable	0	0	0	0	0	0	0	0	0	0	0.67	9.73	0	0	0	1.49	4.3	0	0.89			
	13 beverage non-refundable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	14 food	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.24	0				
	15 other / multi-material	0	0	0	0	0	0	0	0	0	0	8.1	0	0	0	0	0.12	0.89					
	16 Ceramic	0	0	0	0	0	0	0	0	0	0	0.96	0	0	0	0	0.45	0					
	17 blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Metals	18 aluminum beverage refundable	0	0	0	0	0	0	0	0	0	0	0.23	3.27	0	0	0	5.32	0.03	4.36	0.03	1.06		
	19 aluminum beverage non-refundable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	20 other aluminum	0	0	0	0	0	0	0	0	0	0	0.02	0	0	0	0	0.49	0.1					
	21 steel beverage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	22 other ferrous	0	0	0	0	0	0	0	0	0	0	2.32	0	0	0	5.32	3.52	0.77					
	23 non-ferrous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	24 other / multi-material	0	0	0	0	0	0	0	0	0	0	0.7	0	0	0	0	0.32	0.16					
	25 blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	26 blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Plastic	27 PET beverage (#1)	0	0	0	0	0	0	0	0	0	0	0.5	15.95	0	0	0	0	0.36	12.68	0	2.24		
	28 other PET	0	0	0	0	0	0	0	0	0	0	0.22	0	0	0	0	0.68	0	0				
	29 HDPE rigid (#2)	0	0	0	0	0	0	0	0	0	0	5.1	0	0	0	0	1.08	0.06					
	30 LDPE rigid (#4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	31 HDPE film (#2)	0	0	0	0	0	0	0	0	0	0	0.52	0	0	0	0	0.36	0.3					
	32 LDPE film (#4)	0	0	0	0	0	0	0	0	0	0	3.08	0	0	0	0	3.68	0.84		</td			

Sample ID#	GV-SA82		GV-SA83		GV-SA84		GV-SA85		GV-SA86		GV-SA87		GV-SA88		GV-SA89		GV-SA90		GV-SA91															
Date	6/6/2005		Date	6/6/2005		Date	6/6/2005		Date	6/6/2005		Date	6/15/2005		Date	6/15/2005		Date	6/15/2005															
Time	12:15pm		Time	1:12pm		Time	1:55pm		Time	3:16pm		Time	4:04pm		Time	8:15am		Time	11:06am															
Weather	Sunny		Weather	Sunny		Weather	Sunny		Weather	Sunny		Weather	Sunny		Weather	Sunny		Weather	Sunny															
Load Source	Comm ICI		Load Source	Comm ICI		Load Source	Comm ICI		Load Source	Comm ICI		Load Source	Comm ICI		Load Source	Comm ICI		Load Source	Comm ICI															
Comments	Demolition		Comments	Demolition		Comments	Demolition		Comments	Demolition		Comments	Demolition		Comments	S-H Res		Comments	S-H Res															
Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1		Moisture (1 = dry, 5 = wet)	1															
Load Mass (kg)	80		Load Mass (kg)	4835		Load Mass (kg)	4490		Load Mass (kg)	4125		Load Mass (kg)	5470		Load Mass (kg)	2080		Load Mass (kg)	200															
Sample Mass (kg)	138		Sample Mass (kg)	138		Sample Mass (kg)	138		Sample Mass (kg)	138		Sample Mass (kg)	137.96		Sample Mass (kg)	143.07		Sample Mass (kg)	134.38		Sample Mass (kg)	145.52												
All GVL Sampl																																		
Mean sample mass (kg)																																		
142.43																																		
Primary Category	Secondary Category		Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)	Material Mass (kg)	Primary Category Mass (kg)												
Leather	40	Leather	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
Rubber	41	used tires	0	0	0	0	0	0	0	0	0	0	0	0.02	0	0	0	0	0.52	0.52	15.04	15.22												
	42	other rubber	0	0	0	0	0	0	0	0	0	0	0	0.02	0	0	0	0	0	0	0.18													
	43	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
Organic	45	kitchen-animal	0	138	0	138	0	138	0	138	0	138	0.78	78.29	0	143.07	0	70.8	3.22	78.22	0.04	43.9												
	46	kitchen-vegetable	0	0	0	0	0	0	0	0	0	0	0	57.53	0	0	0	0	0	33.9	1.96													
	47	yard waste	0	0	0	0	0	0	0	0	0	0	0	0.06	0	0	0	0	0	0	0													
	48	landscaping	0	0	0	0	0	0	0	0	0	0	0	19.24	0	143.07	0	0	31.82	3.44														
	49	wood	138	138	138	138	138	138	138	138	138	138	138	0.68	0	0	0	70.8	9.28	38.46														
	50	other / multi-materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
	51	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
Brown Goods	53	electrical and electronic appliances and toys	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0	0	0	0	0.49	0.49	0.19												
Bulky Goods	54	office and household furniture	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
	55	blank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
Textiles	57	natural	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.84	7.72													
	58	synthetic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.88	3.24													
Construction	59	including renovation and demolition waste - gyroproc, used lumber, concrete asphalt, brick, rocks and dirt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35.37	35.37	5.68	5.68													
Residue	60	small unidentified material and fines	0	0	0	0	0	0	0	0	0	0	0	2.12	2.12	0	0	0	0	2.82	2.82	0.22												
Hazardous	61	automotive	0	0	0	0	0	0	0	0	0	0	0	1.14	1.78	0	0	0	0	0.5	18.81	0												
	62	paint / decorative	0	0	0	0	0	0	0	0	0	0	0	0.08	0	0	0	0	0	0.94	0.1													
	63	building / woodworking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
	64	garden / pool / septic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
	65	pet / hobby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
	66	medical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													
	67	aerosol	0	0	0	0	0	0	0	0	0	0	0	0.23	0	0	0	0	0	0.19	0.09													
	68	cosmetics/personal products	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0	0	0	1.47	0.11													
	69	batteries - lead acid (car)	0	0	0	0	0																											

Raw Sort Data
▪ *Armstrong/Spallumcheen*

Table B-2 Raw sort data - AL

Sample ID#	A-SA1	A-SA2	A-SA3	A-SA4	A-SA5	A-SA6	A-SA7
Date	5/9/2005	5/9/2005	5/9/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005
Time	10:20am	12:50pm	2:50pm	8:30am	11:45am	2:10pm	
Weather	Sunny	Cloudy	cloudy	cloudy	Cloudy	cloudy	
Load Source	Comm Res	Comm Res	S-H Res	Comm Res	Comm ICI	Comm ICI	S-H Res
Comments							
Moisture (1 = dry, 5 = wet)							
Load mass (kg)	0	0	0	1	1	1	1
Sample mass (kg)	119.38	105.88	101.26	8600	5100	2140	415
114.66	114.46	122.82	110.69				
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
		Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
Paper	0 newspaper	1.52	17.25	0.6	13.35	0	5.56
	1 cardboard	3.48		3.77		4.18	
	2 fine / ledger	0.62		2.15		4.82	
	3 glossy	0.52		0.16		2.04	
	4 packaging	0		0		0	
	5 tetra pack	0.01		0		0.52	
	6 non-packaging	0		0		0	
	7 other / multi-material	0.08		0		5.69	
	8 contaminated	4.55		0		2.84	
	9 tissue / paper toweling	6.47		6.67		4.98	
	10 blank	0		0		0	
	11 blank	0		0		0	
Glass	12 beverage refundable	0	2.4	0.53	3.41	0.28	7.08
	13 beverage non-refundable	0		0		0	
	14 food	0.49		2.88		0	
	15 other / multi-material	1.91		0		6.8	
	16 Ceramics	0		0		0	
	17 blank	0		0		0	
Metals	18 aluminum beverage refundable	0.01	4.34	0	1.67	0	28.94
	19 aluminum beverage non-refundable	0		0		0	
	20 other aluminum	2.35		1.47		0	
	21 steel beverage	0		0		0	
	22 other ferrous	1.42		0.2		20.22	
	23 non-ferrous	0		0		0	
	24 other / multi-material	0.56		0		8.28	
	25 blank	0		0		0	
	26 blank	0		0		0	
Plastic	27 PET beverage (#1)	0.02	18.98	0.02	12.76	0.08	14.05
	28 other PET	0.72		1.01		0.84	
	29 HDPE rigid (#2)	2.74		1.6		6.96	
	30 LDPE rigid (#4)	0.18		0.22		0	
	31 HDPE film (#2)	1.04		1.14		0	
	32 LDPE film (#4)	4.53		4.11		0.23	
	33 PVC (#3)	0.06		0.06		0	
	34 PS (#6)	1.27		2.26		0.18	
	35 PP (#5)	3.13		0.98		0.06	
	36 other plastics	0		0		0	
	37 multi-resin / multi-materials	5.29		1.36		6.54	
	38 multi-resin (#7)	0		0		0	
	39 blank	0		0		0	

Table B-2 Raw sort data - AL

Sample ID#	A-SA1	A-SA2	A-SA3	A-SA4	A-SA5	A-SA6	A-SA7
Date	5/9/2005	5/9/2005	5/9/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005
Time	10:20am	12:50pm	2:50pm	8:30am	11:45am	2:10pm	
Weather	Sunny	Cloudy	cloudy	cloudy	Cloudy	cloudy	
Load Source	Comm Res	Comm Res	S-H Res	Comm Res	Comm ICI	Comm ICI	S-H Res
Comments							
Moisture (1 = dry, 5 = wet)	0	0	0	1	1	1	1
Load mass (kg)	119.38	105.88	101.26	8600	5100	2140	415
Sample mass (kg)				114.66	113.46	122.82	110.69
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
		Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
Leather	40 Leather	0.22	0.22	0.02	0.02	0.2	0.2
Rubber	41 used tires	0	0.66	0	5.82	0	0.18
	42 other rubber	0.66		5.82		1.64	0.62
	43 blank	0		0		0	0.52
	44 blank	0		0		0	0
Organic	45 kitchen-animal	4.12	40.42	7.71	38.94	0.65	24.19
	46 kitchen-vegetable	28.87		21.93		0.07	19.11
	47 yard waste	0.62		0		0	15.05
	48 landscaping	2.52		1.12		0	35.37
	49 wood	3.88		1.78		11.18	1.12
	50 other / multi-materials	0.41		6.4		0.1	0
	51 blank	0		0		0	4.7
	52 blank	0		0		0	0
Brown Goods	53 electrical and electronic appliances and toys	0.51	0.51	0.23	0.23	0	0.21
Bulky Goods	54 office and household furniture	0	0	0	0	0.23	0.23
	55 blank	0		0		0	0
	56 blank	0		0		0	0
Textiles	57 natural	14.88	17.4	8.32	11.6	0.32	0.34
	58 synthetic	2.52		3.28		0.02	0.48
Construction	59 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	0.86	0.86	5.08	5.08	32.69	32.69
						6.02	6.02
						23.58	23.58
Residue	60 small unidentified material and fines	0	0	0	0	0	0
Hazardous	61 automotive	0	11.03	0	3.62	0	1.16
	62 paint / decorative	0		0		0	1.76
	63 building / woodworking	0		0		0	1.78
	64 garden / pool / septic	2		0		0	2.29
	65 pet / hobby	0		0		0	0.68
	66 medical	0.17		0.21		0	0
	67 aerosol	0.31		0		0.09	0.01
	68 cosmetics/personal products	0		0		0.15	0.49
	69 batteries - lead acid (car)	0		0.69		0	0.07
	70 batteries - dry cell	0.07		0.57		0	0.03
	71 animal litter	7.67		2.15		0	0
	72 diapers	0.81		0		0	0
	73 blank	0		0		0	0
Other	74 other	2.03	2.03	4.47	4.47	0	0
	75 blank	0		0		0	0
	76 blank	0		0		0	0
Total sorted mass (kg)	116.1	116.1	100.97	100.97	102.22	102.22	115.99
Net sample mass lost during sorting (kg)	3.28	3.28	4.91	4.91	-0.96	-0.96	-1.33
Percent net sample mass lost during sorting (kg)	2.75%	2.75%	4.64%	4.64%	-0.95%	-0.95%	-1.16%
Absolute value of percent net sample mass lost during sorting (kg)	2.75%	2.75%	4.64%	4.64%	0.95%	0.95%	1.16%
					1.16%	1.16%	0.26%
						0.26%	0.26%
						0.26%	0.37%
						0.26%	3.37%
						0.26%	1.62%
						0.26%	1.62%
						0.26%	1.62%

Table B-2 Raw sort data - AL

Sample ID#	A-SA8	A-SA9	A-SA10	A-SA11	A-SA12	A-SA13	A-SA14
Date	5/11/2005	5/11/2005	5/11/2005	5/11/2005	5/11/2005	5/12/2005	5/12/2005
Time	8:30am	10:00am	1:45PM	12:45pm	2:27pm	8:30am	11:40am
Weather	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny	Sunny
Load Source	Comm ICI	S-H Res	S-H ICI	Comm Res	S-H Res	Comm ICI/Res	S-H Res
Comments							
Moisture (1 = dry, 5 = wet)	1	1	1	1	1	1	1
Load mass (kg)	9470	255	446	8633	310	9230	60
Sample mass (kg)	116.2	151.86	145.82	143.33	139.06	135.84	146.3
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
Paper	0 newspaper	0	11.26	2.16	16.96	2.22	10.27
	1 cardboard	2.96		9.17		5.11	
	2 fine / ledger	0.28		0.32		0.22	
	3 glossy	0.08		0.42		0.44	
	4 packaging	0.18		0.83		1.08	
	5 tetra pack	0.5		0.02		0.02	
	6 non-packaging	0		0		0	
	7 other / multi-material	6.04		0.1		0.34	
	8 contaminated	0		0.35		0	
	9 tissue / paper toweling	1.22		3.59		0.84	
	10 blank	0		0		0	
	11 blank	0		0		0	
Glass	12 beverage refundable	0	3.36	0.27	1.9	0.21	2.02
	13 beverage non-refundable	0		0		0	
	14 food	1.08		0		1.81	
	15 other / multi-material	0.05		1.63		0	
	16 Ceramics	2.23		0		0	
	17 blank	0		0		0	
Metals	18 aluminum beverage refundable	0.02	3.11	0	1.3	0.02	1.52
	19 aluminum beverage non-refundable	0		0		0	
	20 other aluminum	0.48		0.12		0	
	21 steel beverage	0		0		0	
	22 other ferrous	0		0.37		1.24	
	23 non-ferrous	0		0.81		0.26	
	24 other / multi-material	2.61		0		0	
	25 blank	0		0		0	
	26 blank	0		0		0	
Plastic	27 PET beverage (#1)	0	9.8	0.02	14.14	0.02	4.54
	28 other PET	0.54		0.44		0.12	
	29 HDPE rigid (#2)	0.56		1.58		1.17	
	30 LDPE rigid (#4)	0		0		1.4	
	31 HDPE film (#2)	0.48		0.68		0.04	
	32 LDPE film (#4)	2.88		1.98		0.18	
	33 PVC (#3)	0		1.2		0	
	34 PS (#6)	2.12		0.71		0.78	
	35 PP (#5)	1.1		0.2		0.56	
	36 other plastics	0		1.44		0.01	
	37 multi-resin / multi-materials	2.12		5.82		0.26	
	38 multi-resin (#7)	0		0.07		0	
	39 blank	0		0		0	

Table B-2 Raw sort data - AL

Sample ID#		A-SA8		A-SA9		A-SA10		A-SA11		A-SA12		A-SA13		A-SA14		
Date		5/11/2005		5/11/2005		5/11/2005		5/11/2005		5/11/2005		5/12/2005		5/12/2005		
Time		8:30am		10:00am		1:45PM		12:45pm		2:27pm		8:30am		11:40am		
Weather		Sunny		Sunny		Sunny		Sunny		Sunny		Sunny		Sunny		
Load Source		Comm ICI		S-H Res		S-H ICI		Comm Res		S-H Res		Comm ICI/Res		S-H Res		
Comments																
Moisture (1 = dry, 5 = wet)		1		1		446		1		310		9230		60		
Load mass (kg)		9470		255		146		8633		139.06		135.84		146.3		
Sample mass (kg)		116.2		151.86		145.82		143.33								
Primary Category		Secondary Category		Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	
Leather	40	Leather		1.1	1.1	0	0	0	0.48	0.48	1.31	1.31	2.88	2.88	2.28	
Rubber	41	used tires		0	1.16	0	0	0	0	2.72	0	0.1	0	0.54	0	
	42	other rubber		1.16		0		0		2.72		0.1		0.54		
	43	blank		0		0		0		0		0		0		
	44	blank		0		0		0		0		0		0		
Organic	45	kitchen-animal		0.02	34.61	2.52	94.22	74.86	107.26	8.14	61.54	0	4.74	8.4	46.2	
	46	kitchen-vegetable		24.88		18.68		32.32		52.3		1.22		35.2		4.34
	47	yard waste		0		0		0.02		0		0		0.76		0
	48	landscaping		0.3		9.9		0		0.84		0		0		18.34
	49	wood		9.41		63.12		0.06		0.26		3.52		1.12		3.72
	50	other / multi-materials		0		0		0		0		0		0.72		0
	51	blank		0		0		0		0		0		0		0
	52	blank		0		0		0		0		0		0		0
Brown Goods	53	electrical and electronic appliances and toys		8.01	8.01	0.46	0.46	0	0	2.71	2.71	63.06	63.06	2.42	2.42	48.72
Bulky Goods	54	office and household furniture		0	0	0	0	0	0	0	0	0	0	0	0	0
	55	blank		0		0		0		0		0		0		0
	56	blank		0		0		0		0		0		0		0
Textiles	57	natural		17.08	17.78	3.76	4.64	0.38	2.9	4.64	4.64	0.72	1.24	13.14	15.68	8.54
	58	synthetic		0.7		0.88		2.52		0		0.52		2.54		2.28
Construction	59	including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt		13.4	13.4	10.02	10.02	0	0	4.58	4.58	6.44	6.44	0	0	22.5
Residue	60	small unidentified material and fines		0	0	0	0	0	0	0	0	0	0	0	0	0
Hazardous	61	automotive		5.06	8.19	0.08	3.82	0.25	11.85	5.8	29.18	28.6	28.92	0.02	17.52	0
	62	paint / decorative		0		0		0		0		0		0.14		10.24
	63	building / woodworking		0		0		0		0		0		0		0
	64	garden / pool / septic		0		0		0		0		0.31		0		0
	65	pet / hobby		0		0		0		0		0		0		0
	66	medical		0.31		0.03		0.13		0.17		0.01		0.35		0
	67	aerosol		0.11		0.05		0		0.23		0		0.27		0.17
	68	cosmetics/personal products		0.79		0.01		0		0.29		0		0.01		0
	69	batteries - lead acid (car)		0		0		0		0		0		0		0
	70	batteries - dry cell		0.01		0		0		0		0		0.1		0.39
	71	animal litter		1.91		3.31		1.81		0.11		0		2.61		0
	72	diapers		0		0.34		9.66		22.58		0		14.02		0
	73	blank		0		0		0		0		0		0		0
Other	74	other		0.65	0.65	2.43	2.43	0.21	0.21	1.71	1.71	0.4	0.4	1.39	1.39	0
	75	blank		0		0		0		0		0		0		0
	76	blank		0		0		0		0		0		0		0
Total sorted mass (kg)		112.43		112.43		149.89		149.89		140.57		138.73		138.73		147.57
Net sample mass lost during sorting (kg)		3.77		3.77		1.97		1.97		5.25		4.6		4.6		-1.27
Percent net sample mass lost during sorting (kg)		3.24%		3.24%		1.30%		1.30%		3.60%		3.60%		3.21%		-0.87%
Absolute value of percent net sample mass lost during sorting (kg)		3.24%		3.24%		1.30%		1.30%		3.60%		3.21%		3.21%		0.87%

Table B-2 Raw sort data - AL

Sample ID#	A-SA15	A-SA16	A-SA17	A-SA18	A-SA19	A-SA20
Date	5/12/2005	5/12/2005	5/13/2005	5/13/2005	5/13/2005	5/16/2005
Time	1:05pm	2:30pm	8:30am	10:46am	1:15am	8:50am
Weather	Sunny	Sunny	Cloudy	Sunny	Sunny	Cloudy
Load Source	Comm ICI/Res	S-H Res	Comm ICI/Res	S-H Res	Comm Res	S-H Res
Comments						
Moisture (1 = dry, 5 = wet)	1	1	1	3		1
Load mass (kg)	2355	145	2115	95	8600	450
Sample mass (kg)	144.72	111.7	153.67	137.5	130.8	147.2
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)
		Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)
Paper	0 newspaper	0.36	15.22	0.94	7.16	3.84
	1 cardboard	1.72		1.94		4.52
	2 fine / ledger	3.44		0.22		4.1
	3 glossy	1.34		0.12		4.24
	4 packaging	1.86		0		1.32
	5 tetra pack	0.04		0		0
	6 non-packaging	0		0		0
	7 other / multi-material	0		2.04		0.1
	8 contaminated	0.34		0.04		0.68
	9 tissue / paper toweling	6.12		1.86		4.1
	10 blank	0		0		0
	11 blank	0		0		0
Glass	12 beverage refundable	0.27	2.6	0	4.96	0.53
	13 beverage non-refundable	0		0		0
	14 food	1.69		0		2.71
	15 other / multi-material	0		4.76		0.3
	16 Ceramics	0.64		0.2		2.55
	17 blank	0		0		0
Metals	18 aluminum beverage refundable	0.05	33.33	0	65.08	0
	19 aluminum beverage non-refundable	0		0		0
	20 other aluminum	30.86		0.12		0.08
	21 steel beverage	0		0		0
	22 other ferrous	2.32		28.82		0
	23 non-ferrous	0		0		0.01
	24 other / multi-material	0.1		36.14		1.8
	25 blank	0		0		0
	26 blank	0		0		0
Plastic	27 PET beverage (#1)	0.12	10.36	0.06	5.64	0.2
	28 other PET	0.26		0.28		0.46
	29 HDPE rigid (#2)	3.02		1.08		2
	30 LDPE rigid (#4)	0		0		0.02
	31 HDPE film (#2)	1.26		0.88		0.78
	32 LDPE film (#4)	0.58		1.3		3.14
	33 PVC (#3)	0		0.64		0
	34 PS (#6)	1.26		0.6		2.56
	35 PP (#5)	1.1		0.2		1.42
	36 other plastics	0		0		0
	37 multi-resin / multi-materials	2.76		0.6		1.98
	38 multi-resin (#7)	0		0		0
	39 blank	0		0		0

Table B-2 Raw sort data - AL

Sample ID#	A-SA15	A-SA16	A-SA17	A-SA18	A-SA19	A-SA20
Date	5/12/2005	5/12/2005	5/13/2005	5/13/2005	5/13/2005	5/16/2005
Time	1:05pm	2:30pm	8:30am	10:46am	1:15am	8:50am
Weather	Sunny	Sunny	Cloudy	Sunny	Sunny	Cloudy
Load Source	Comm ICI/Res	S-H Res	Comm ICI/Res	S-H Res	Comm Res	S-H Res
Comments						
Moisture (1 = dry, 5 = wet)	1	1	1	3		1
Load mass (kg)	2355	145	2115	95	8600	450
Sample mass (kg)	144.72	111.7	153.67	137.5	130.8	147.2
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)
		Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)
Leather	40 leather	0.98	0.98	0.08	0.08	0
Rubber	41 used tires	0	1.46	0	0.64	0
	42 other rubber	1.46		0.64		0.02
	43 blank	0		0		0
	44 blank	0		0		0
Organic	45 kitchen-animal	0	39.86	3.22	15.56	0.86
	46 kitchen-vegetable	17.02		4.84	56.26	7.64
	47 yard waste	0		0	0	39.4
	48 landscaping	3.34		0.42	0.08	7.02
	49 wood	19.5		7.08	19.72	7.88
	50 other / multi-materials	0		0	0	0
	51 blank	0		0	0	0
	52 blank	0		0	0	0
Brown Goods	53 electrical and electronic appliances and toys	23.32	23.32	2.08	2.08	1.12
Bulky Goods	54 office and household furniture	0	0	0	0	0
	55 blank	0		0	0	0
	56 blank	0		0	0	0
Textiles	57 natural	0.48	1.16	2.04	2.08	5.5
	58 synthetic	0.68		0.04		1
Construction	59 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	9.2	9.2	0.52	0.52	4.42
						4.42
						0
Residue	60 small unidentified material and fines	0	0	0	0	0
					0	0
Hazardous	61 automotive	0.46	6.29	7.68	11.9	0.02
	62 paint / decorative	5.6		0.58		2.08
	63 building / woodworking	0		0		0
	64 garden / pool / septic	0		0		0.1
	65 pet / hobby	0		0		0
	66 medical	0		3.27		0.01
	67 aerosol	0.23		0.09		0
	68 cosmetics/personal products	0		0.01		0.17
	69 batteries - lead acid (car)	0		0		0
	70 batteries - dry cell	0		0.27		0.15
	71 animal litter	0		0		7.79
	72 diapers	0		0		0
	73 blank	0		0		0
Other	74 other	0	0	1.99	1.99	2.7
	75 blank	0		0		0
	76 blank	0		0		0
Total sorted mass (kg)	143.78	143.78	117.69	117.69	145.34	145.34
Net sample mass lost during sorting (kg)	0.94	0.94	-5.99	-5.99	8.33	8.33
Percent net sample mass lost during sorting (kg)	0.65%	0.65%	-5.36%	-5.36%	5.42%	5.42%
Absolute value of percent net sample mass lost during sorting (kg)	0.65%	0.65%	5.36%	5.36%	5.42%	5.42%
					4.20%	4.20%
					3.23%	3.23%
					2.85%	2.85%
					2.85%	2.85%

Table B-2 Raw sort data - AL

Sample ID#	A-SA21	A-SA22	A-SA23	A-SA24	Mean sample mass (kg) (+/-)
Date	5/17/2005	5/17/2005	5/17/2005	5/17/2005	
Time	8:40am	10:06am	12:44pm	2:18pm	
Weather	Rain	Rain	Cloudy	Sunny	
Load Source	S-H Res	Comm Res	Comm Res	Comm Res	
Comments					
Moisture (1 = dry, 5 = wet)	1	1	2	1	
Load mass (kg)	170	7660	7995	7485	
Sample mass (kg)	139.5	140.32	139.32	155.88	
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
Paper	0 newspaper	2.55	10.6	11.64	46.48
	1 cardboard	2.08		2.36	4.18
	2 fine / ledger	1.28		9.44	1.6
	3 glossy	1.01		7.76	0.2
	4 packaging	1.2		2.18	2.26
	5 tetra pack	0.02		0.14	0.2
	6 non-packaging	0		0	0
	7 other / multi-material	0.68		4.3	0.42
	8 contaminated	0.18		0.78	1.24
	9 tissue / paper toweling	1.6		7.88	3.22
	10 blank	0		0	0
	11 blank	0		0	0
Glass	12 beverage refundable	2.41	6.42	0	3
	13 beverage non-refundable	0		0	0
	14 food	2.05		2.47	2.07
	15 other / multi-material	1.96		0.53	0.99
	16 Ceramics	0		0	0
	17 blank	0		0	0
Metals	18 aluminum beverage refundable	1.51	2.21	0.08	2.87
	19 aluminum beverage non-refundable	0		0	0
	20 other aluminum	0		0	0
	21 steel beverage	0		0	0
	22 other ferrous	0.09		1.76	2.38
	23 non-ferrous	0.23		0.45	0
	24 other / multi-material	0.38		0.58	17.51
	25 blank	0		0	0
	26 blank	0		0	0
Plastic	27 PET beverage (#1)	0.68	13.25	1.7	13.2
	28 other PET	0.4		0	0.06
	29 HDPE rigid (#2)	1.12		2.66	2.62
	30 LDPE rigid (#4)	0		0	1.02
	31 HDPE film (#2)	0.16		1.04	0.98
	32 LDPE film (#4)	1.04		2.56	3.12
	33 PVC (#3)	0		0	1.78
	34 PS (#6)	0.63		0.68	0
	35 PP (#5)	0.62		2.64	0.88
	36 other plastics	1.56		0	2.7
	37 multi-resin / multi-materials	7.04		1	12.42
	38 multi-resin (#7)	0		0.92	0.25
	39 blank	0		0	0.15

Table B-2 Raw sort data - AL

Sample ID#	A-SA21		A-SA22		A-SA23		A-SA24		Mean sample mass (kg) (+/-) 131.97 16.49
Date	5/17/2005		5/17/2005		5/17/2005		5/17/2005		
Time	8:40am		10:06am		12:44pm		2:18pm		
Weather	Rain		Rain		Cloudy		Sunny		
Load Source	S-H Res		Comm Res		Comm Res		Comm Res		
Comments									
Moisture (1 = dry, 5 = wet)	1		1		2		1		
Load mass (kg)	170		7660		7995		7485		
Sample mass (kg)	139.5		140.32		139.32		155.88		
Primary Category									
	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)						
Leather	40 leather	0.32	0.32	0	0	0	0	0.76	0.76
Rubber	41 used tires	0	0	0	0.06	0	1.16	0	0.72
	42 other rubber	0		0.06		1.16			0.72
	43 blank	0		0		0			0
	44 blank	0		0		0			0
Organic	45 kitchen-animal	0.3	45.28	2.58	51.02	6.38	33.72	0.48	37.44
	46 kitchen-vegetable	40.96		36.64		26.7			22.48
	47 yard waste	0.02		10.5		0			1.58
	48 landscaping	0		0		0.64			8.56
	49 wood	4		1.3		0			4.34
	50 other / multi-materials	0		0		0			0
	51 blank	0		0		0			0
	52 blank	0		0		0			0
Brown Goods	53 electrical and electronic appliances and toys	49.2	49.2	0	0	0.07	0.07	18.05	18.05
Bulky Goods	54 office and household furniture	0	0	0	0	0	0	0	0
	55 blank	0		0		0			0
	56 blank	0		0		0			0
Textiles	57 natural	2.22	2.54	3.22	4.88	15.72	19.1	5.48	9.94
	58 synthetic	0.32		1.66		3.38			4.46
Construction	59 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt								
		0	0	0.88	0.88	1.04	1.04	4.06	4.06
Residue	60 small unidentified material and fines	0	0	0	0	0	0	0	0
Hazardous	61 automotive	0.68	13.81	0	9.03	0	8.12	0.86	1.88
	62 paint / decorative	0.14		0		0			0.48
	63 building / woodworking	0		0		0			0
	64 garden / pool / septic	0		0		0			0
	65 pet / hobby	0		0		0			0
	66 medical	0.03		0.25		0.07			0
	67 aerosol	0.15		0.27		0.05			0.29
	68 cosmetics/personal products	0.03		0.53		0.33			0.25
	69 batteries - lead acid (car)	0		0		0			0
	70 batteries - dry cell	0		0.17		0.53			0
	71 animal litter	12.71		7.81		0			0
	72 diapers	0.07		0		7.14			0
	73 blank	0		0		0			0
Other	74 other	0.42	0.42	3.98	3.98	3.81	3.81	2.07	2.07
	75 blank	0		0		0			0
	76 blank	0		0		0			0
Total sorted mass (kg)	144.05	144.05	135.4	135.4	132.37	132.37	156.16	156.16	
Net sample mass lost during sorting (kg)	-4.55	-4.55	4.92	4.92	6.95	6.95	-0.28	-0.28	
Percent net sample mass lost during sorting (kg)	-3.26%	-3.26%	3.51%	3.51%	4.99%	4.99%	-0.18%	-0.18%	
Absolute value of percent net sample mass lost during sorting (kg)	3.26%	3.26%	3.51%	3.51%	4.99%	4.99%	0.18%	0.18%	

Raw Sort Data

- *Lumby*



Table B-3 Raw sort table - LL

Sample ID#	LL-SA1	LL-SA2	LL-SA3	LL-SA4	LLSA5
Date	6/16/2005	6/16/2005	6/16/2005	6/16/2005	6/17/2005
Time	10:30am	11:50am	1:30pm	2:55pm	1:10pm
Weather	Cloudy	Sunny	Sunny	Cloudy	Rain
Load Source	S-H Res	S-H Res	Comm ICI	Comm Res	S-H Res
Comments					
Moisture					
Load mass (kg)	0	0	2840	7430	305
Sample mass (kg)	147.84	151.36	138.53	138.3	138.64
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
		Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
Paper	0 newspaper	4.06	12.42	0.3	22.19
	1 cardboard	0.96		2.04	
	2 fine / ledger	0.34		3.7	
	3 glossy	1.82		1.78	
	4 packaging	1.66		2.56	
	5 tetra pack	0.26		0.25	
	6 non-packaging	0		0	
	7 other / multi-material	0.72		8.18	
	8 contaminated	0.44		0.54	
	9 tissue / paper toweling	2.16		2.84	
	10 blank	0		0	
	11 blank	0		0	
Glass	12 beverage refundable	1.13	3.19	7.88	9.03
	13 beverage non-refundable	0		0	
	14 food	1.11		0.65	
	15 other / multi-material	0.95		0.11	
	16 Ceramics	0		0.39	
	17 blank	0		0	
Metals	18 aluminum beverage refundable	0.23	1.91	0.15	4.79
	19 aluminum beverage non-refundable	0		0	
	20 other aluminum	0.34		0.06	
	21 steel beverage	0		0	
	22 other ferrous	1		4.32	
	23 non-ferrous	0		0	
	24 other / multi-material	0.34		0.26	
	25 blank	0		0	
	26 blank	0		0	
Plastic	27 PET beverage (#1)	0.1	19.8	0.78	14.98
	28 other PET	0.4		0.56	
	29 HDPE rigid (#2)	1.62		1.44	
	30 LDPE rigid (#4)	0		0	
	31 HDPE film (#2)	0.46		2.24	
	32 LDPE film (#4)	6.1		3.58	
	33 PVC (#3)	6.24		0	
	34 PS (#6)	1.38		0.78	
	35 PP (#5)	0.46		0.28	
	36 other plastics	2.72		1.38	
	37 multi-resin / multi-materials	0.32		3.94	
	38 #7	0		0	
	39 blank	0		0	

Table B-3 Raw sort table - LL

Sample ID#	LL-SA1		LL-SA2		LL-SA3		LL-SA4		LLSA5	
Date	6/16/2005		6/16/2005		6/16/2005		6/16/2005		6/17/2005	
Time	10:30am		11:50am		1:30pm		2:55pm		1:10pm	
Weather	Cloudy		Sunny		Sunny		Cloudy		Rain	
Load Source	S-H Res		S-H Res		Comm ICI		Comm Res		S-H Res	
Comments										
Moisture										
Load mass (kg)	0		0		2840		7430		305	
Sample mass (kg)	147.84		151.36		138.53		138.3		138.64	
Primary Category	Secondary Category		Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
Leather	40	Leather	0	0	0.28	0.28	0	0	0	0
Rubber	41	used tires	0	0.96	0	2.34	12.68	15.46	0	0.16
	42	other rubber	0.96		2.34		2.78		0.16	
	43	blank	0		0		0		0	
	44	blank	0		0		0		0	
Organic	45	kitchen-animal	0.8	42.88	3.7	52.54	1.88	49.14	3.3	70.92
	46	kitchen-vegetable	26.44		24.82		19.94		34.94	
	47	yard waste	1.32		0.48		0		0	
	48	landscaping	0.7		0		22.86		32.68	
	49	wood	13.62		23.54		4.46		0	
	50	other / multi-materials	0		0		0		0	
	51	blank	0		0		0		0	
	52	blank	0		0		0		0	
Brown Goods	53	electrical and electronic appliances and toys	0.71	0.71	0	0	0	0.19	0.19	0
Bulky Goods	54	office and household furniture	0	0	0	0	0	0	0	0
	55	blank	0		0		0		0	
	56	blank	0		0		0		0	
Textiles	57	natural	1	1.14	1.2	6.08	0.9	1.16	4.72	11
	58	synthetic	0.14		4.88		0.26		6.28	
Construction	59	including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	57.3	57.3	0	0	1.3	1.3	3.07	3.07
Residue	60	small unidentified material and fines	2.72	2.72	0.46	0.46	0.34	0.34	0.94	0.08
Hazardous	61	automotive	0	4.1	0	35.65	0	9.84	0	4.35
	62	paint / decorative	1.88		0.1		0		0	
	63	building / woodworking	0		0		0		0	
	64	garden / pool / septic	0		0		0		0	
	65	pet / hobby	0		0		0		0	
	66	medical	0		0.05		0		0	0.05
	67	aerosol	0.25		0		0		0.09	0
	68	cosmetics/personal products	0		0.09		0.07		0.23	0.11
	69	batteries - lead acid (car)	0		0		0		0	
	70	batteries - dry cell	0		0		0		0	
	71	animal litter	0.31		3.63		0.82		0.55	0
	72	diapers	1.66		31.78		8.95		3.48	2.62
	73	blank	0		0		0		0	
Other	74	other	0	0	0	0	0	0	0	0
	75	blank	0		0		0		0	
	76	blank	0		0		0		0	
Total sorted mass (kg)			147.13	147.13	148.34	148.34	134.18	134.18	134.95	144.75
Net sample mass lost during sorting (kg)			0.71	0.71	3.02	3.02	4.35	4.35	3.35	-6.11
Percent net sample mass lost during sorting (kg)			0.48%	0.48%	2.00%	2.00%	3.14%	3.14%	2.42%	-4.41%
Absolute value of percent net sample mass lost during sorting (kg)			0.48%	0.48%	2.00%	2.00%	3.14%	3.14%	2.42%	4.41%

Table B-3 Raw sort table - LL

Sample ID#	LL-SA6	LL-SA7	LL-SA8	LL-SA9	Mean sample mass (kg) (+/-)				
Date	6/17/2005	6/17/2005	6/18/2005	6/18/2005					
Time	1:50pm	3:00pm	10:30am	12:15am					
Weather	Rain	Rain	Rain	Rain					
Load Source	S-H Res	Comm Res	S-H Res	S-H Res					
Comments									
Moisture	4	4	145	3					
Load mass (kg)	1740	1770	142.97	175					
Sample mass (kg)	147.58	138.54		139.92					
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)		
Paper	0 newspaper	0	11.34	8.68	32.28	0	0	0.34	6.48
	1 cardboard	0.3		0.96		0		1.54	
	2 fine / ledger	0.2		1.08		0		0.04	
	3 glossy	1.7		7.26		0		0.64	
	4 packaging	1.58		3.6		0		0.34	
	5 tetra pack	0.28		0.14		0		1.06	
	6 non-packaging	0		0		0		0	
	7 other / multi-material	1.8		0.56		0		0.2	
	8 contaminated	2.72		3.26		0		1.8	
	9 tissue / paper toweling	2.76		6.74		0		0.52	
	10 blank	0		0		0		0	
	11 blank	0		0		0		0	
Glass	12 beverage refundable	0.43	3.27	0.77	4.82	1.8	1.8	0.21	4.77
	13 beverage non-refundable	0		0		0		0	
	14 food	1.51		1.65		0		1.83	
	15 other / multi-material	0		0.67		0		1.99	
	16 Ceramics	1.33		1.73		0		0.74	
	17 blank	0		0		0		0	
Metals	18 aluminum beverage refundable	0.07	21.42	0.09	5.81	0	0	0.15	1.24
	19 aluminum beverage non-refundable	0		0		0		0	
	20 other aluminum	0.32		0.28		0		0.16	
	21 steel beverage	0		0		0		0	
	22 other ferrous	20.83		5.16		0		0.69	
	23 non-ferrous	0		0		0		0	
	24 other / multi-material	0.2		0.28		0		0.24	
	25 blank	0		0		0		0	
	26 blank	0		0		0		0	
Plastic	27 PET beverage (#1)	4.9	18.31	0	21.89	0	8.2	0	4.61
	28 other PET	0.54		0.92		0		0.1	
	29 HDPE rigid (#2)	1.9		5.4		8.2		0.34	
	30 LDPE rigid (#4)	0		0		0		0	
	31 HDPE film (#2)	0.4		0.44		0		0.56	
	32 LDPE film (#4)	6		2.14		0		2.54	
	33 PVC (#3)	0		0		0		0.06	
	34 PS (#6)	1.98		5.3		0		0.24	
	35 PP (#5)	0.68		1.4		0		0.18	
	36 other plastics	0.76		0.78		0		0.14	
	37 multi-resin / multi-materials	0.94		5.5		0		0.34	
	38 #7	0.21		0.01		0		0.11	
	39 blank	0		0		0		0	

Table B-3 Raw sort table - LL

Sample ID#	LL-SA6	LL-SA7	LL-SA8	LL-SA9	Mean sample mass (kg)	(+/-)
Date	6/17/2005	6/17/2005	6/18/2005	6/18/2005		
Time	1:50pm	3:00pm	10:30am	12:15am		
Weather	Rain	Rain	Rain	Rain		
Load Source	S-H Res	Comm Res	S-H Res	S-H Res		
Comments						
Moisture						
Load mass (kg)	4 1740 147.58	4 1770 138.54	145 142.97	3 175 139.92		
Sample mass (kg)						
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)
						Total Primary Category Mass (kg)
Leather	40 Leather	0.06	0.06	1.36	1.36	0
Rubber	41 used tires	0	0.16	0	0.4	0
	42 other rubber	0.16		0.4		0
	43 blank	0		0		0
	44 blank	0		0		0
Organic	45 kitchen-animal	0.8	50.24	1.24	40.54	0
	46 kitchen-vegetable	31.16		37.52		11.06
	47 yard waste	0		0		0
	48 landscaping	11.84		1.78		0
	49 wood	6.44		0		3.84
	50 other / multi-materials	0		0		0
	51 blank	0		0		0
	52 blank	0		0		0
Brown Goods	53 electrical and electronic appliances and toys	16.58	16.58	0.75	0.75	0
Bulky Goods	54 office and household furniture	0	0	0	0	0
	55 blank	0		0		0
	56 blank	0		0		0
Textiles	57 natural	2.92	6.52	6.02	11.24	2
	58 synthetic	3.6		5.22		0
Construction	59 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	7.76	7.76	2.32	2.32	17.8
						17.8
						62.88
Residue	60 small unidentified material and fines	0.58	0.58	2.76	2.76	0
Hazardous	61 automotive	0	13.69	0	18.9	0
	62 paint / decorative	0		0		0
	63 building / woodworking	0		0		0
	64 garden / pool / septic	0		0		1.02
	65 pet / hobby	0		0		0
	66 medical	0		0.19		0
	67 aerosol	0.11		0.51		0
	68 cosmetics/personal products	0.49		0.25		0.07
	69 batteries - lead acid (car)	0		0		0
	70 batteries - dry cell	0.42		0		0.08
	71 animal litter	1.47		13.23		0
	72 diapers	11.2		4.72		4
	73 blank	0		0		0
Other	74 other	0	0	0	0	0
	75 blank	0		0		0
	76 blank	0		0		0
Total sorted mass (kg)	149.93	149.93	143.07	143.07	143.69	143.69
Net sample mass lost during sorting (kg)	-2.35	-2.35	-4.53	-4.53	-0.72	-0.72
Percent net sample mass lost during sorting (kg)	-1.59%	-1.59%	-3.27%	-3.27%	-0.50%	-0.50%
Absolute value of percent net sample mass lost during sorting (kg)	1.59%	1.59%	3.27%	3.27%	0.50%	0.50%
					0.62%	0.62%

Raw Sort Data

- *Cherryville*



Table B-4 Raw sort data - CL

Sample ID#		CV-SA1	CV-SA2		
		Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
Date	6/17/2005			6/17/2005	
Time	8:30am			9:30am	
Weather	Cloudy			Cloudy	
Load Source	S-H Res			S-H Res	
Comments	Bin from Cherryville			Bin from Cherryville	
Moisture		1			1
Load mass (kg)	7583			7583	
Sample mass (kg)	141.42			140.4	
Primary Category					
Secondary Category					
Paper	0 newspaper	0.62	19.52	0.08	11.14
	1 cardboard	12.4		1.78	
	2 fine / ledger	0.08		0.88	
	3 glossy	0.08		0	
	4 packaging	1.5		3.46	
	5 tetra pack	0		0.12	
	6 non-packaging	0		0	
	7 other / multi-material	1.58		0.54	
	8 contaminated	1.64		2.16	
	9 tissue / paper toweling	1.62		2.12	
	10 blank	0		0	
	11 blank	0		0	
Glass	12 beverage refundable	3.51	6.22	2.25	5.57
	13 beverage non-refundable	0		0	
	14 food	1.31		0	
	15 other / multi-material	0.25		3.32	
	16 Ceramics	1.15		0	
	17 blank	0		0	
Metals	18 aluminum beverage refundable	0.11	2.07	1.25	6.11
	19 aluminum beverage non-refundable	0		0	
	20 other aluminum	0.18		0.44	
	21 steel beverage	0		0	
	22 other ferrous	1.74		4.2	
	23 non-ferrous	0		0	
	24 other / multi-material	0.04		0.22	
	25 blank	0		0	
	26 blank	0		0	
Plastic	27 PET beverage (#1)	0.32	6.15	0.66	9.9
	28 other PET	0.1		0.14	
	29 HDPE rigid (#2)	1.08		3.66	
	30 LDPE rigid (#4)	0		0	
	31 HDPE film (#2)	0.12		1.14	
	32 LDPE film (#4)	1.22		1.88	
	33 PVC (#3)	1.22		0	
	34 PS (#6)	0.38		0.56	
	35 PP (#5)	0.18		0.52	
	36 other plastics	1.08		0.4	
	37 multi-resin / multi-materials	0.36		0.94	
	38 #7	0.09		0	
	39 blank	0		0	

Table B-4 Raw sort data - CL

Sample ID#		CV-SA1	CV-SA2		
Date	6/17/2005		6/17/2005		
Time	8:30am		9:30am		
Weather	Cloudy		Cloudy		
Load Source	S-H Res		S-H Res		
Comments	Bin from Cherryville		Bin from Cherryville		
Moisture					
Load mass (kg)	1 7583		1 7583		
Sample mass (kg)	141.42		140.4		
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)	Total Primary Category Mass (kg)
Leather	40 leather	0	0	1.54	1.54
Rubber	41 used tires	19.16	32.86	0	14.6
	42 other rubber	13.7		14.6	
	43 blank	0		0	
	44 blank	0		0	
Organic	45 kitchen-animal	5.3	41.28	0.94	42.78
	46 kitchen-vegetable	8.8		30.94	
	47 yard waste	0		0	
	48 landscaping	0		0	
	49 wood	27.18		10.9	
	50 other / multi-materials	0		0	
	51 blank	0		0	
	52 blank	0		0	
Brown Goods	53 electrical and electronic appliances and toys	0	0	1.38	1.38
Bulky Goods	54 office and household furniture	0	0	0	0
	55 blank	0		0	
	56 blank	0		0	
Textiles	57 natural	0.48	26.54	5.78	9.64
	58 synthetic	26.06		3.86	
Construction	59 including renovation and demolition waste - gypsum, used lumber, concrete asphalt, brick, rocks and dirt	0	0	36.14	36.14
Residue	60 small unidentified material and fines	0.42	0.42	0.58	0.58
Hazardous	61 automotive	0	7.27	0	1.35
	62 paint / decorative	0		0.08	
	63 building / woodworking	0		0	
	64 garden / pool / septic	0		0	
	65 pet / hobby	0		0	
	66 medical	0		0.5	
	67 aerosol	0.59		0.17	
	68 cosmetics/personal products	0.49		0.07	
	69 batteries - lead acid (car)	0		0	
	70 batteries - dry cell	0		0	
	71 animal litter	6.19		0.21	
	72 diapers	0		0.32	
	73 blank	0		0	
Other	74 other	0	0	0	0
	75 blank	0		0	
	76 blank	0		0	
Total sorted mass (kg)		142.33	142.33	140.73	140.73
Net sample mass lost during sorting (kg)		-0.91	-0.91	-0.33	-0.33
Percent net sample mass lost during sorting (%)		-0.64%	-0.64%	-0.24%	-0.24%
Absolute value of percent net sample mass lost during sorting (kg)		0.64%	0.64%	0.24%	0.24%

Table B-4 Raw sort data - CL

Sample ID#		CV-SA3		Mean sample mass (kg) (+/-) 141.49 1.12	
Date		6/17/2005			
Time		10:45am			
Weather		Rain			
Load Source		S-H Res			
Comments		Bin from Cherryville			
Moisture		1			
Load mass (kg)		7583			
Sample mass (kg)		142.64			
Primary Category		Material Mass (kg)	Total Primary Category Mass (kg)		
Secondary Category					
Paper	0	newspaper	0.14	2.42	
	1	cardboard	0.26		
	2	fine / ledger	0		
	3	glossy	0		
	4	packaging	0.16		
	5	tetra pack	0		
	6	non-packaging	0		
	7	other / multi-material	0.2		
	8	contaminated	0.7		
	9	tissue / paper toweling	0.96		
	10	blank	0		
	11	blank	0		
Glass	12	beverage refundable	0	34.25	
	13	beverage non-refundable	0		
	14	food	0.59		
	15	other / multi-material	33.33		
	16	Ceramics	0.33		
	17	blank	0		
Metals	18	aluminum beverage refundable	0.23	1.45	
	19	aluminum beverage non-refundable	0		
	20	other aluminum	0.12		
	21	steel beverage	0		
	22	other ferrous	1.04		
	23	non-ferrous	0		
	24	other / multi-material	0.06		
	25	blank	0		
	26	blank	0		
Plastic	27	PET beverage (#1)	0.8	5.1	
	28	other PET	0		
	29	HDPE rigid (#2)	0.16		
	30	LDPE rigid (#4)	0		
	31	HDPE film (#2)	0.1		
	32	LDPE film (#4)	3.1		
	33	PVC (#3)	0		
	34	PS (#6)	0.44		
	35	PP (#5)	0.22		
	36	other plastics	0.14		
	37	multi-resin / multi-materials	0.14		
	38	#7	0		
	39	blank	0		

Table B-4 Raw sort data - CL

Sample ID#		CV-SA3		Mean sample mass (kg) (+/-) 141.49 1.12	
Date		6/17/2005			
Time		10:45am			
Weather		Rain			
Load Source		S-H Res			
Comments		Bin from Cherryville			
Moisture		1			
Load mass (kg)		7583			
Sample mass (kg)		142.64			
Primary Category		Material Mass (kg)	Total Primary Category Mass (kg)		
Secondary Category					
Leather	40	Leather	0	0	
Rubber	41	used tires	0	0.24	
	42	other rubber	0.24		
	43	blank	0		
	44	blank	0		
Organic	45	kitchen-animal	1.52	31.72	
	46	kitchen-vegetable	12.94		
	47	yard waste	0		
	48	landscaping	2.9		
	49	wood	14.36		
	50	other / multi-materials	0		
	51	blank	0		
	52	blank	0		
Brown Goods	53	electrical and electronic appliances and toys	12.12	12.12	
Bulky Goods	54	office and household furniture	12.12	12.12	
	55	blank	0		
	56	blank	0		
Textiles	57	natural	0	0	
	58	synthetic	0		
Construction	59	including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	36.41	36.41	
Residue	60	small unidentified material and fines	0	0	
Hazardous	61	automotive	0	5.49	
	62	paint / decorative	0		
	63	building / woodworking	0		
	64	garden / pool / septic	0		
	65	pet / hobby	0		
	66	medical	0		
	67	aerosol	0.11		
	68	cosmetics/personal products	0.37		
	69	batteries - lead acid (car)	0		
	70	batteries - dry cell	0		
	71	animal litter	2.31		
	72	diapers	2.7		
	73	blank	0		
Other	74	other	0	0	
	75	blank	0		
	76	blank	0		
Total sorted mass (kg)		141.32	141.32		
Net sample mass lost during sorting (kg)		1.32	1.32		
Percent net sample mass lost during sorting (kg)		0.93%	0.93%		
Absolute value of percent net sample mass lost during sorting (kg)		0.93%	0.93%		

Raw Sort Data

▪ *Kingfisher*



Table B-5 Raw sort data - KFT

Sample ID#		KF-SA1	KF-SA2	
Date		5/16/2005	5/16/2005	
Time		10:30am	1:00am	
Load Source		S-H Res	S-H Res	
Comments				
Moisture		1	1	
Load mass (kg)		3870	3870	
Total sample mass (kg)		139.08	140.28	
Category		Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)
Paper			Total Primary Category Mass (kg)	
0	newspaper	1.64	16.56	0.34
1	cardboard	1.62		2.78
2	fine / ledger	1.4		0.88
3	glossy	2.48		2.9
4	packaging	3.3		1.48
5	tetra pack	0.14		0.02
6	non-packaging	0		0
7	other / multi-material	2.88		3.02
8	contaminated	0.48		0.12
9	tissue / paper toweling	2.62		3.9
10	blank	0		0
11	blank	0		0
Glass	12 beverage refundable	0.89	6.79	0.43
13	beverage non-refundable	0		0
14	food	4.81		6.33
15	other / multi-material	0		2.05
16	Ceramics	1.09		0.35
17	blank	0		0
Metals	18 aluminum beverage refundable	0.8	7.47	0
19	aluminum beverage non-refundable	0		0
20	other aluminum	0		0.48
21	steel beverage	0		0
22	other ferrous	2.16		2.98
23	non-ferrous	0		0
24	other / multi-material	4.51		0
25	blank	0		0
26	blank	0		0
Plastic	27 PET beverage (#1)	0.66	27.35	0.28
28	other PET	1.1		1.5
29	HDPE rigid (#2)	3.7		1.41
30	LDPE rigid (#4)	0		0
31	HDPE film (#2)	3.38		3
32	LDPE film (#4)	4.14		3.54
33	PVC (#3)	0.36		0.3
34	PS (#6)	1.92		1.04
35	PP (#5)	5.4		1.75
36	other plastics	6.66		4.13
37	multi-resin / multi-materials	0		0
38	multi-resin (#7)	0.03		0
39	blank	0		0

Table B-5 Raw sort data - KFT

Sample ID#		KF-SA1	KF-SA2	
Date		5/16/2005	5/16/2005	
Time		10:30am	1:00am	
Load Source		S-H Res	S-H Res	
Comments				
Moisture		1	1	
Load mass (kg)		3870	3870	
Total sample mass (kg)		139.08	140.28	
Category		Material Mass (kg)	Total Primary Category Mass (kg)	Material Mass (kg)
Leather	40	Leather	1.16	1.16
Rubber	41	used tires	0	1.98
	42	other rubber	1.98	0
	43	blank	0	0
	44	blank	0	0
Organic	45	kitchen-animal	8.64	42.77
	46	kitchen-vegetable	32.45	37.54
	47	yard waste	0.3	3.62
	48	landscaping	0	0.6
	49	wood	1.38	0.09
	50	other / multi-materials	0	0
	51	blank	0	0
	52	blank	0	0
Brown Goods	53	electrical and electronic appliances and toys	8.16	8.16
Bulky Goods	54	office and household furniture	0	0
	55	blank	0	0
	56	blank	0	0
Textiles	57	natural	6.17	7.95
	58	synthetic	1.78	1.28
Construction	59	including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	3.8	3.8
				37.84
Residue	60	small unidentified material and fines	0	0
Hazardous	61	automotive	0.36	4.26
	62	paint / decorative	3.22	1.32
	63	building / woodworking	0	0
	64	garden / pool / septic	0	0
	65	pet / hobby	0	0
	66	medical	0.47	1.69
	67	aerosol	0	0.27
	68	cosmetics/personal products	0.21	0.21
	69	batteries - lead acid (car)	0	0
	70	batteries - dry cell	0	0
	71	animal litter	0	1.07
	72	diapers	0	0
	73	blank	0	0
Other	74	other	2.84	2.84
	75	blank	0	0
	76	blank	0	0
Total sorted mass (kg)		131.09	131.09	137.89
Net sample mass lost during sorting (kg)		7.99	7.99	2.39
Percent net sample mass lost during sorting (kg)		5.74%	5.74%	1.70%
Absolute value of percent net sample mass lost during sorting (kg)		5.74%	5.74%	1.70%
				1.70%

Table B-5 Raw sort data - KFT

Sample ID#		KF-SA3	
Date		5/16/2005	
Time		2:30am	
Load Source		S-H Res	
Comments			
Moisture		1	
Load mass (kg)		3870	
Total sample mass (kg)		145.44	
Category		Material Mass (kg)	Total Primary Category Mass (kg)
Paper	0 newspaper	0.8	7.52
	1 cardboard	1.36	
	2 fine / ledger	0.98	
	3 glossy	0	
	4 packaging	2.22	
	5 tetra pack	0	
	6 non-packaging	0	
	7 other / multi-material	0.02	
	8 contaminated	0.82	
	9 tissue / paper toweling	1.32	
	10 blank	0	
	11 blank	0	
Glass	12 beverage refundable	2.65	5.34
	13 beverage non-refundable	0	
	14 food	0.93	
	15 other / multi-material	0.37	
	16 Ceramics	1.39	
	17 blank	0	
Metals	18 aluminum beverage refundable	0.09	7.55
	19 aluminum beverage non-refundable	0	
	20 other aluminum	0	
	21 steel beverage	0	
	22 other ferrous	2.01	
	23 non-ferrous	4.97	
	24 other / multi-material	0.48	
	25 blank	0	
	26 blank	0	
Plastic	27 PET beverage (#1)	0.32	21.18
	28 other PET	0.42	
	29 HDPE rigid (#2)	9.66	
	30 LDPE rigid (#4)	0	
	31 HDPE film (#2)	0.68	
	32 LDPE film (#4)	1.12	
	33 PVC (#3)	1.14	
	34 PS (#6)	0.42	
	35 PP (#5)	1.74	
	36 other plastics	5.68	
	37 multi-resin / multi-materials	0	
	38 multi-resin (#7)	0	
	39 blank	0	

Table B-5 Raw sort data - KFT

Sample ID#		KF-SA3	
Date		5/16/2005	
Time		2:30am	
Load Source		S-H Res	
Comments			
Moisture		1	
Load mass (kg)		3870	
Total sample mass (kg)		145.44	
Category		Material Mass (kg)	Total Primary Category Mass (kg)
Leather	40	Leather	0
Rubber	41	used tires	0
	42	other rubber	1.32
	43	blank	0
	44	blank	0
Organic	45	kitchen-animal	0
	46	kitchen-vegetable	23.56
	47	yard waste	1.9
	48	landscaping	5.1
	49	wood	3.66
	50	other / multi-materials	0
	51	blank	0
	52	blank	0
Brown Goods	53	electrical and electronic appliances and toys	12.36
Bulky Goods	54	office and household furniture	0
	55	blank	0
	56	blank	0
Textiles	57	natural	0.16
	58	synthetic	2.24
Construction	59	including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	50.8
			50.8
Residue	60	small unidentified material and fines	0
Hazardous	61	automotive	0
	62	paint / decorative	0
	63	building / woodworking	0
	64	garden / pool / septic	0
	65	pet / hobby	0
	66	medical	0.07
	67	aerosol	0.09
	68	cosmetics/personal products	0
	69	batteries - lead acid (car)	0
	70	batteries - dry cell	0
	71	animal litter	0
	72	diapers	0
	73	blank	0
Other	74	other	0.4
	75	blank	0
	76	blank	0
Total sorted mass (kg)		143.25	143.25
Net sample mass lost during sorting (kg)		2.19	2.19
Percent net sample mass lost during sorting (kg)		1.51%	1.51%
Absolute value of percent net sample mass lost during sorting (kg)		1.51%	1.51%

Raw Sort Data

- *Silver Star*



Table B-6 Raw sort data - SST

Sample ID#		SS-SA1	
Date		5/27/2005	
Time		9:30am	
Weather		Sunny	
Load Source		S-H Res	
Comments			
Moisture		2	
Load mass (kg)		5280	
Total sample mass (kg)		129.28	
Primary Category		Material Mass (kg)	Total Primary Category Mass (kg)
Secondary Category			
Paper	0 newspaper	2.9	16.9
	1 cardboard	2.98	
	2 fine / ledger	0.9	
	3 glossy	3.5	
	4 packaging	1.4	
	5 tetra pack	0.5	
	6 non-packaging	0	
	7 other / multi-material	1.12	
	8 contaminated	0.54	
	9 tissue / paper toweling	3.06	
	10 blank	0	
	11 blank	0	
Glass	12 beverage refundable	1.41	12.16
	13 beverage non-refundable	0	
	14 food	0.99	
	15 other / multi-material	3.17	
	16 Ceramics	6.59	
	17 blank	0	
Metals	18 aluminum beverage refundable	0.19	3.37
	19 aluminum beverage non-refundable	0	
	20 other aluminum	0.45	
	21 steel beverage	0	
	22 other ferrous	1.29	
	23 non-ferrous	1.14	
	24 other / multi-material	0.3	
	25 blank	0	
	26 blank	0	
Plastic	27 PET beverage (#1)	0.26	17.27
	28 other PET	0.24	
	29 HDPE rigid (#2)	0.84	
	30 LDPE rigid (#4)	0	
	31 HDPE film (#2)	0.54	
	32 LDPE film (#4)	1.96	
	33 PVC (#3)	0.36	
	34 PS (#6)	0.76	
	35 PP (#5)	0.32	
	36 other plastics	10.68	
	37 multi-resin / multi-materials	1.14	
	38 #7	0.17	
	39 blank	0	

Table B-6 Raw sort data - SST

Sample ID#		SS-SA1	
Date		5/27/2005	
Time		9:30am	
Weather		Sunny	
Load Source		S-H Res	
Comments			
Moisture		2	
Load mass (kg)		5280	
Total sample mass (kg)		129.28	
Primary Category		Material Mass (kg)	Total Primary Category Mass (kg)
Secondary Category			
Leather	40	Leather	0
Rubber	41	used tires	0
	42	other rubber	0.08
	43	blank	0
	44	blank	0
Organic	45	kitchen-animal	1.1
	46	kitchen-vegetable	17.56
	47	yard waste	8.4
	48	landscaping	0.42
	49	wood	17.9
	50	other / multi-materials	0
	51	blank	0
	52	blank	0
Brown Goods	53	electrical and electronic appliances and toys	2.18
Bulky Goods	54	office and household furniture	18.16
	55	blank	0
	56	blank	0
Textiles	57	natural	0.76
	58	synthetic	2.6
Construction	59	including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	0
			0
Residue	60	small unidentified material and fines	1.22
Hazardous	61	automotive	0.06
	62	paint / decorative	0
	63	building / woodworking	0.46
	64	garden / pool / septic	0
	65	pet / hobby	0
	66	medical	0
	67	aerosol	0.65
	68	cosmetics/personal products	0.11
	69	batteries - lead acid (car)	0
	70	batteries - dry cell	0
	71	animal litter	13.47
	72	diapers	0.37
	73	blank	0
Other	74	other	0
	75	blank	0
	76	blank	0
Total sorted mass (kg)		135.2	
Net sample mass lost during sorting (kg)		-5.92	
Percent net sample mass lost during sorting (kg)		-4.58%	
Absolute value of percent net sample mass lost during sorting (kg)		4.58%	

Table B-6 Raw sort data - SST

Sample ID#	SS-SA2		
Date	6/7/2005		
Time	2:00pm		
Weather	Rain		
Load Source	S-H Res		
Comments	Construction		
Moisture	1		
Load mass (kg)	6180		
Total sample mass (kg)	152.2		
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)
Paper	0 newspaper	0	0
	1 cardboard	0	
	2 fine / ledger	0	
	3 glossy	0	
	4 packaging	0	
	5 tetra pack	0	
	6 non-packaging	0	
	7 other / multi-material	0	
	8 contaminated	0	
	9 tissue / paper toweling	0	
	10 blank	0	
	11 blank	0	
Glass	12 beverage refundable	0	0
	13 beverage non-refundable	0	
	14 food	0	
	15 other / multi-material	0	
	16 Ceramics	0	
	17 blank	0	
Metals	18 aluminum beverage refundable	0	0
	19 aluminum beverage non-refundable	0	
	20 other aluminum	0	
	21 steel beverage	0	
	22 other ferrous	0	
	23 non-ferrous	0	
	24 other / multi-material	0	
	25 blank	0	
	26 blank	0	
Plastic	27 PET beverage (#1)	0	0
	28 other PET	0	
	29 HDPE rigid (#2)	0	
	30 LDPE rigid (#4)	0	
	31 HDPE film (#2)	0	
	32 LDPE film (#4)	0	
	33 PVC (#3)	0	
	34 PS (#6)	0	
	35 PP (#5)	0	
	36 other plastics	0	
	37 multi-resin / multi-materials	0	
	38 #7	0	
	39 blank	0	

Table B-6 Raw sort data - SST

Sample ID#	SS-SA2		
Date	6/7/2005		
Time	2:00pm		
Weather	Rain		
Load Source	S-H Res		
Comments	Construction		
Moisture	1		
Load mass (kg)	6180		
Total sample mass (kg)	152.2		
Primary Category	Secondary Category	Material Mass (kg)	Total Primary Category Mass (kg)
Leather	40 Leather	0	0
Rubber	41 used tires	0	0
	42 other rubber	0	
	43 blank	0	
	44 blank	0	
Organic	45 kitchen-animal	0	132.7
	46 kitchen-vegetable	0	
	47 yard waste	0	
	48 landscaping	0	
	49 wood	132.7	
	50 other / multi-materials	0	
	51 blank	0	
	52 blank	0	
Brown Goods	53 electrical and electronic appliances and toys	0	0
Bulky Goods	54 office and household furniture	0	0
	55 blank	0	
	56 blank	0	
Textiles	57 natural	0	0
	58 synthetic	0	
Construction	59 including renovation and demolition waste - gyproc, used lumber, concrete asphalt, brick, rocks and dirt	19.5	19.5
Residue	60 small unidentified material and fines	0	0
Hazardous	61 automotive	0	0
	62 paint / decorative	0	
	63 building / woodworking	0	
	64 garden / pool / septic	0	
	65 pet / hobby	0	
	66 medical	0	
	67 aerosol	0	
	68 cosmetics/personal products	0	
	69 batteries - lead acid (car)	0	
	70 batteries - dry cell	0	
	71 animal litter	0	
	72 diapers	0	
	73 blank	0	
Other	74 other	0	0
	75 blank	0	
	76 blank	0	
Total sorted mass (kg)		152.2	152.2
Net sample mass lost during sorting (kg)		0	0
Percent net sample mass lost during sorting (kg)		0.00%	0.00%
Absolute value of percent net sample mass lost during sorting (kg)		0.00%	0.00%

APPENDIX C

- Detailed Kolmogorov-Smirnov test results



Table C-1 Komogorov-Smirnov test results for GVL, Comm ICI

N = 32, Critical value at 95% confidence interval = 0.234					
Primary category	Mean	Standard deviation	Maximum K-S difference	Comparison with critical value	Normal distribution?
Paper	9.70%	9.45%	0.156	<	Yes
Glass	1.91%	4.29%	0.328	>	No
Metals	3.02%	3.90%	0.219	<	Yes
Plastic	8.01%	9.27%	0.194	<	Yes
Leather	0.34%	0.91%	0.387	>	No
Rubber	1.35%	2.47%	0.303	>	No
Organic	54.41%	29.78%	0.116	<	Yes
Brown Goods	1.66%	5.00%	0.398	>	No
Bulky Goods	0.00%	-	-	-	-
Textiles	2.78%	4.55%	0.274	>	No
Construction	9.82%	20.33%	0.347	>	No
Residue	0.54%	0.77%	0.244	>	No
Hazardous	6.23%	11.02%	0.286	>	No
Other	0.00%	-	-	-	-

Table C-2 Komogorov-Smirnov test results for GVL, Comm Res

N = 33, Critical value at 95% confidence interval = 0.231					
Primary category	Mean	Standard deviation	Maximum K-S difference	Comparison with critical value	Normal distribution?
Paper	9.96%	5.85%	0.081	<	Yes
Glass	2.04%	1.99%	0.176	<	Yes
Metals	2.88%	3.21%	0.285	>	No
Plastic	7.45%	4.02%	0.083	<	Yes
Leather	0.13%	0.20%	0.373	>	No
Rubber	1.92%	3.52%	0.348	>	No
Organic	53.33%	18.25%	0.113	<	Yes
Brown Goods	1.68%	3.76%	0.327	>	No
Bulky Goods	0.00%	-	-	-	-
Textiles	4.01%	3.25%	0.146	<	Yes
Construction	7.89%	15.35%	0.352	>	No
Residue	0.85%	0.59%	0.111	<	Yes
Hazardous	6.75%	10.06%	0.251	>	No
Other	0.00%	-	-	-	-

Table C-3 Komogorov-Smirnov test results for GVL, S-H Res

N = 19, Critical value at 95% confidence interval = 0.301					
Primary category	Mean	Standard deviation	Maximum K-S difference	Comparison with critical value	Normal distribution?
Paper	6.35%	7.35%	0.221	<	Yes
Glass	1.88%	2.41%	0.255	<	Yes
Metals	4.28%	6.06%	0.306	>	No
Plastic	6.81%	8.02%	0.198	<	Yes
Leather	0.01%	0.03%	0.472	>	No
Rubber	2.80%	7.50%	0.415	>	No
Organic	39.96%	28.15%	0.123	<	Yes
Brown Goods	3.38%	12.16%	0.435	>	No
Bulky Goods	1.77%	6.67%	0.499	>	No
Textiles	3.02%	3.75%	0.259	<	Yes
Construction	22.07%	35.05%	0.286	<	Yes
Residue	0.40%	0.78%	0.370	>	No
Hazardous	5.82%	6.93%	0.228	<	Yes
Other	0.18%	0.71%	0.497	>	No

Table C-4 Komogorov-Smirnov test results for AL, Comm Res

N = 8, Critical value at 95% confidence interval = 0.454					
Primary category	Mean	Standard deviation	Maximum K-S difference	Comparison with critical value	Normal distribution?
Paper	16.99%	8.88%	0.353	<	Yes
Glass	2.55%	0.63%	0.189	<	Yes
Metals	7.41%	7.50%	0.286	<	Yes
Plastic	12.71%	3.15%	0.176	<	Yes
Leather	0.15%	0.18%	0.263	<	Yes
Rubber	1.35%	1.79%	0.255	<	Yes
Organic	33.94%	7.02%	0.167	<	Yes
Brown Goods	1.84%	3.98%	0.389	<	Yes
Bulky Goods	0.84%	1.72%	0.437	<	Yes
Textiles	7.65%	5.12%	0.168	<	Yes
Construction	2.67%	1.84%	0.227	<	Yes
Residue	0.00%	-	-	-	-
Hazardous	7.17%	6.17%	0.237	<	Yes
Other	2.09%	1.30%	0.177	<	Yes

Table C-5 Komogorov-Smirnov test results for AL, S-H Res

N = 9, Critical value at 95% confidence interval = 0.430					
Primary category	Mean	Standard deviation	Maximum K-S difference	Comparison with critical value	Normal distribution?
Paper	7.89%	5.86%	0.186	<	Yes
Glass	3.11%	2.26%	0.204	<	Yes
Metals	15.68%	18.21%	0.252	<	Yes
Plastic	9.54%	4.33%	0.241	<	Yes
Leather	0.58%	0.56%	0.178	<	Yes
Rubber	2.17%	6.11%	0.492	>	No
Organic	29.07%	19.62%	0.157	<	Yes
Brown Goods	13.83%	18.58%	0.296	<	Yes
Bulky Goods	0.00%	-	-	-	-
Textiles	2.31%	2.11%	0.251	<	Yes
Construction	7.79%	10.69%	0.233	<	Yes
Residue	0.00%	-	-	-	-
Hazardous	7.19%	6.48%	0.209	<	Yes
Other	0.76%	0.72%	0.270	<	Yes

APPENDIX D

- Photographs taken during the sorts





Sorting of waste at the Armstrong RDF

PHOTO #1



Sample collection at the Armstrong RDF

PHOTO #2



Sort set-up at the Lumby RDF

PHOTO #3



Front end loader delivering a sample at the Greater Vernon RDF

PHOTO #4



Project No: R29.201

Client: Regional District of North Okanagan