

# Kerbside Waste Audit May/June 2013 City of Burnside



Report prepared for City of Burnside  
by Kathy Scarborough  
Waste Audit Manager  
*KESAB environmental solutions*  
July 10<sup>th</sup> 2013

**City of Burnside Kerbside Bin Audit 2013**  
**Report July, 2013**

Prepared for:

City of Burnside  
401 Greenhill Road  
Tusmore  
South Australia 5065

Contact: John Draper  
Senior Project Officer  
Phone: (08) 8366 4254  
Email: [JDraper@burnside.sa.gov.au](mailto:JDraper@burnside.sa.gov.au)

Project Manager:  
*KESAB environmental solutions*  
Contact: Kathy Scarborough  
Waste Audit Manager  
Phone: (08) 8234 7255  
Email: [kathy@kesab.asn.au](mailto:kathy@kesab.asn.au)

Waste Audit Assistants: Andre Tertsch  
Malee Barclay  
Brett Meldrum  
Matt Brown

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## 1. Background

The City of Burnside has a residential population of approximately 42, 200 people in just under 19,000 private dwellings; the 2011 census data records an average of 2.4 people per household. Burnside is located 10 minutes from Adelaide's Central Business District and covers 28 suburbs spanning to Adelaide's foot hills.

*"The City of Burnside is one of Adelaide's oldest residential areas, and is well known for its tree lined streets, period architecture and plentiful reserves and gardens within our 30 km<sup>2</sup> area."* (www.burnside.sa.gov.au)

Council is committed to providing cost effective services and in December 2012 introduced a new three bin system for waste, recycling and organics collections (replacing the split waste and recycling bin) and kitchen caddy and compostable bags for diversion of food scraps to organics.

Residents were provided with 140L waste and 240L recycling and organics bins plus a kitchen basket with bio-bags (replaced annually). Residual waste is collected weekly and recycling and organics bins are collected on alternate fortnights. Organics bins were previously purchased by residents and collected monthly.

Council also provides an annual hard rubbish and e- waste collection for all residential properties.

The City of Burnside has engaged the services of East Waste to collect and dispose of household waste and recyclables. Residual waste is delivered to Integrated Waste Services (IWS) at Wingfield, recycling to VISY Recycling at Wingfield and organics to Jeffries receiving yard, also at Wingfield.

Zero Waste SA Kerbside Performance Incentives have been established to encourage South Australian Councils to implement kerbside recycling systems that maximise the value of our resources and avoid and reduce waste to landfill. An audit to assess the effectiveness of new collection systems is advised a minimum of six months after their introduction.

KESAB *environmental solutions* were engaged to conduct an audit of the City of Burnside kerbside bin systems, consistent with the reporting requirements of Zero Waste SA.

In 2005/2006 City of Burnside residents participated in the Zero Waste South Australia Food Waste Pilot. Organics and waste bin audits were conducted in 2005 and 2006 by Flinders Bio-remediation as part of the ZWSA Food Waste Pilot. The split bin waste and recycling system for kerbside collections was in place at that time and organics bins were collected fortnightly and not monthly for the purposes of the trial.

### 1.1 Key Deliverables

The key deliverables for the council waste audit were as follows;

- Develop a detailed Project Management Plan including tasks, schedule and key people
- Engage with Council's waste contractor to organise physical audit

- Establish and manage an audit site in accordance with relevant OHS&W requirements
- Undertake a physical audit of all three waste streams (i.e. waste, recycling and organics) with special consideration to food organics/ bio-bags within the organics stream and bagged materials in recycling loads
- Collect and analyse the physical audit data
- Provide a written report of results and findings of the audit
- Compare results for food diversion with ZWSA trial 2005/2006
- Present the final report to key staff.

## 2. Executive Summary

The City of Burnside bin audit was conducted at Integrated Waste Services (IWS) from Monday May the 27<sup>th</sup> to Friday June 7<sup>th</sup> by KESAB *environmental solutions* according to Zero Waste SA guidelines and Council requirements. An audit of City of Norwood Payneham and St Peters bins was conducted in the same time period; the two councils are adjacent and have alternating recycling and organics collections which enabled the sampling of 100 each of all three bins from the same households over the two week period from each council.

A total of 3,997.73kg of City of Burnside materials were audited over ten collection days; 863.44kg of residual waste bin materials, 1,183.36kg of recycling bin materials and 1,950.93kg from organics bins.

The table below compares the average weight per bin per collection with waste contractor data for June 2013 collections and the average weight in kilograms per household bin per week (kg/hh/wk) for the period July 2012 to May 2013.

Collection	2013 Audit Data	June 2013 East Waste Data	July 2012 to June 2013 East Waste Average.
Waste	8.63 kg/hh/wk	7.15 kg/hh/wk	7.76 kg/hh/wk
Recycling	5.92 kg/hh/wk	4.14 kg/hh/wk	4.21 kg/hh/wk
Organics	9.75 kg/hh/wk	5.49 kg/hh/wk	5.38 kg/hh/wk

Table 1: Average weight per bin; audit v. contractor data.

The 2013 kerbside audit weights are higher than the contractor records, particularly for organics. Contractor data is calculated from the number of households within the council area regardless of whether or not they have presented a bin; audit data is calculate from 100 collected bins. During the audit, organics loads were affected by rain and the weight of wet materials.

This audit shows that Council is diverting 60% of total bin materials across all streams (waste, recycling and organics) from landfill.

### ***Residual Waste Bins***

The average weight of residual waste bins was 8.63kg/hh/wk and consisted of 19% recyclable materials or 1.67kg/hh/wk, 48% organic materials or 4.11kg/hh/wk of which 89% or 3.66kg/hh/wk is food. The remaining 33% of materials cannot be diverted from landfill through kerbside bins and equated to 2.85kg/hh/wk.

6% of waste bin materials can be diverted through special collections and included electronic materials (0.10kg/hh/wk), clean film plastics (0.15kg/hh/wk), re-usable textiles (0.16kg/hh/wk) and other metal (0.08kg/hh/wk).

Materials recorded as 'other' included animal waste (40kg, 0.4kg/hh/wk) and treated wood (25kg, 0.25kg/hh/wk). Pet waste could be diverted to organics if kitty litter is compostable and dog poo is not contained in plastic bags.

Recyclable materials were dominated by food packaging items such as glass jars and sauce bottles, food cans, plastic containers and cardboard food/ biscuit packaging. Toilet rolls and plastic shampoo and personal care product bottles are also missed to the recycling stream.

A large deposit (39kg) of office quality paper in the Tuesday collection equates to 23%, or almost a quarter of the recycling found in waste bins and was clearly an office clean-out; Tuesday's recycling recorded 34.5kg of the same material.



Photos 1 & 2: Recyclable cardboard and coloured HDPE plastics in residual waste.

Compostable materials were mainly food at 42% by weight of the waste bins and 3.7kg/hh/wk; compostable paper (hand towel, tissues and soiled takeaway paper bags) comprise 4% of household waste by weight or 0.32kg/hh/wk. Garden materials contributed very little to kerbside waste bins at a total of only 1.5% of the audited materials and 0.13kg/hh/wk.

A total of 17 bio-bags were found in the waste stream and contained a variety of materials including personal hygiene products and packaging. Four bio-bags in Tuesday's collection contained food scraps only, indicating they had been used for their intended purpose but incorrectly disposed.

### **Recycling Bins**

Burnside residents now have the space of a 240L bin for disposal of recycling and collections show quantities of large cardboard boxes. Contamination with non-recyclable material is also minimal which may reflect the move to separate bins for waste and recycling.





Photos 3 and 4: Recycling loads deposited for audit showing large pieces of cardboard

The average weight of recycling bins was 11.83kg/hh/fortnight or 5.92kg/hh/week; the table below shows the breakdown by main category:

Category	kg/household/week	Percentage
Paper/cardboard	3.58kg/hh/wk	60.4%
Glass	1.23kg/hh/wk	20.8%
Plastics	0.31kg/hh/wk	5.3%
Metal	0.14kg/hh/wk	2.4%
Contamination	0.66kg/hh/wk	11.1%
Total	5.92kg/hh/wk	100%

Table 2: Breakdown of recycling bin materials by kg/hh/wk and % weight.

There were large amounts of catalogues in recycling bins and Tuesday's collection recorded 103kg including bound, undelivered stacks of catalogues. Like the waste collection on Tuesday, there was also a large amount of white office paper in the recycling for this day, 35kg.

Contamination in the recycling bin was recorded at 11%; the main contributors being bagged materials containing a mix of food, packaging and other items in Tuesday's collection and weighing 18kg, and broken glass or glass fines, 29kg in total. It should be noted that VISY recycling can recover some broken glass and glass fines for mixed glass recycling.

Organic material, including food and low quality compostable paper, equated to a low 0.08kg/hh/wk.

There were no bio-bags found in recycling collections.

### **Organics Bins and Bio-bags**

Organics bins weighed an average of 19.5kg/hh/fortnight or 9.75kg/hh/week and recorded a total of 69.8kg (0.35kg/hh/wk) of contamination. It should be noted that almost half of this contamination (33.5kg) was four bags of otherwise clean garden materials.

Contamination was counted for each collection as it must be manually removed from the loads and totalled 199 pieces including 100 pieces of packaging, 15 textiles, 12 recyclables and 12 pieces of treated wood. It was concerning to find a broken compact fluorescent globe in this stream.



Photos 5, 6 and 7: Organics bin contaminants.

A total of 180 bio-bags were counted in the organics bins weighing 157kg; an average weight of 0.87kg/bag. There was 29.1kg of loose food in organics collections equating to a total of 0.93kg/hh/wk of food diverted to organics when added to the weight of bio-bags.

A visual inspection of all organics bins at collection showed 35 bins with bio-bags and 13 of these had only bio-bags and no garden materials, registering a bin capacity of 5 to 10% full.

For the most part the bio-bags were correctly used with a count of 19 pieces of contamination comprising small pieces of plastic, rubber bands and bag ties. On Monday, four bio-bags were re-bagged in clear plastic but had no contamination within them.



Photos 8, 9 & 10: Bio-bags bagged in plastic, organics collection showing bio-bags, bio-bag with no contamination.

## **Recommendations**

City of Burnside residents have embraced the three bin system and kitchen basket for food scraps, delivering collections that are largely free of contamination. However, some recyclable materials are being missed to the waste stream and while this is an encouraging result for the bio-bag system, there are additional volumes of food and compostable paper to divert from landfill to organics.

It is suggested that Burnside maintain or develop an education program to encourage residents to:

- Divert all food to the organics bin loosely, in bio-bags or wrapped in newspaper, removing any plastic packaging and placing that in the waste bin
- Divert low quality contaminated paper to organics
- Divert pet waste to organics
- Promote the disposal of recyclable organic materials to organics bins loosely and not in bags; with the message “If it didn’t grow it doesn’t go”
- Empty and rinse recyclable food packaging – plastic bottles and tubs, food cans, glass jars and bottles – rather than lose these resources to landfill
- Recycle any cardboard packaging from the kitchen and bathroom
- Recycle personal care product packaging – toilet rolls, shampoo and other personal care plastic bottles to recycling bins and tissues to organics collection via the bio-bag system or loosely.
- Refuse ‘junk mail’
- Correctly dispose of hazardous materials such as fluorescent globes and electronics to collections set up for their safe disposal. (ZWSA have recently developed information flyers for hazardous waste disposal)
- Collect clean film plastic for disposal via the Coles REDcycle plastic recycling program. <http://www.coles.com.au/About-Coles/Environment.aspx>

## 4. Methodology

The methodology for the kerbside waste audit was based on Zero Waste SA's Guide to Kerbside Performance Reporting, requiring a sample size of 100 serviced tenements for each of the residual waste, recycling and organics bin streams.

Demographic data used to select sample areas was derived from the City of Burnside profile from the 2011 Census of Population and Housing published by the Australian Bureau of Statistics. See Appendix A.

### 4.1 Sampling Methodology

The 2011 Census records the population of the City of Burnside as 42,193; living in 18,925 dwellings with an average household size of 2.4. Kerbside bin collections are divided across five areas; the number of samples collected from each area was proportional to the number of serviced tenements in that area, with a total of 100 bins collected from each stream. According to the 2011 Census data, The City of Burnside has an average of 18% multi-unit dwellings (MUDs) and these were represented in the sample.

In week 1 of the audit, waste and organics bins were labelled by a KESAB Project Officer on the morning of collection to ensure the waste contractor collected the required sample to a total of 100 bins. In week 2 the same households were labelled for collection of their recycling bins. Bin presentation rates were recorded at this time.

A separate KESAB Project Officer travelled with the collection truck, undertaking a visual assessment of bins, recording the % full, photographing the contents of the organics bins, and recording visible bio-bags in this stream.

When a bin was not presented, an alternative bin in the sample area was collected and the change of address noted on the spreadsheet.

Appendix B provides a full list of targeted and sampled bins.

Collection Day	Suburbs Sampled	SUDs	MUDs	Total
Monday 27.5 and 3.6.13	Beulah Park, Kensington Park, Kensington Gardens	15	3	18
Tuesday 28.5 and 4.6.13	Auldana, Rosslyn Park, Wattle Park, Stonyfell, Erindale, Leabrook, Tasmore	25	2	27
Wednesday 29.5 and 5.6.13	Rose Park, Toorak Gardens, Glenside, Eastwood	10	9	19
Thursday 30.5 and 6.6.13	Hazelwood Park, Burnside, Beaumont	15	2	17
Friday 31.5 and 7.6.13	Linden Park, St. Georges, Frewville, Glenunga, Glen Osmond, Mt. Osmond	17	2	19
Total Bins		82	18	100

Table 3: Breakdown of sample collections by day and suburb

## **4.2 Data Collection**

The bin audit was conducted from the 27<sup>th</sup> of May to the 7<sup>th</sup> of June 2013 in the Industrial Materials Recovery Facility at IWS. Waste, organics and recycling loads were collected for the two councils and dropped in that order. A total of 300 bins from Burnside Council were audited (100 waste, 100 recycling and 100 green organics) over the two weeks.

As the different streams were delivered to the audit site, the material was manually sorted into categories as specified in the Zero Waste SA guide. KESAB has added other categories such as bio-bags, clean film plastic, animal waste and E-waste to identify more options to divert materials.

Bio-bags were separated in all loads, counted and opened to check for contamination in the kitchens organics collections. A count and description of items that contaminated the garden materials in the organics bins was recorded.

Net weights and volumes for each category were recorded manually and subsequently entered into an Excel spread sheet. General comments regarding the streams were recorded and photos of sorted materials taken.

## **4.3 Data Validation**

The waste audit data was validated against the waste contractor's data, from July 2012 to June 2013. Data presented in this report is based on the May/June 2013 kerbside bin audit results calculated using the template provided in the Zero Waste SA Kerbside Performance Reporting Form.

## **4.4 Discrepancy**

There were minor discrepancies due to bins not being presented on the day or being picked up either prior to labelling or in error by the normal collection truck. The proportion of single-unit and multi-unit dwellings was maintained as far as practical when selecting replacement bins for collection.

## 5. Results

A total of 3,997.73kg of materials were audited over five collection days; 863.44kg of residual waste bin materials, 1,183.36kg of recycling bin materials and 1,950.93kg from organics bins. A breakdown of the audit results is provided below. Detailed results and data are presented in the Appendices:

Appendix A: Demographics and Sampling Plan

Appendix B: List of Sampled Streets and Visual Inspection Results

Appendix C: Raw Data

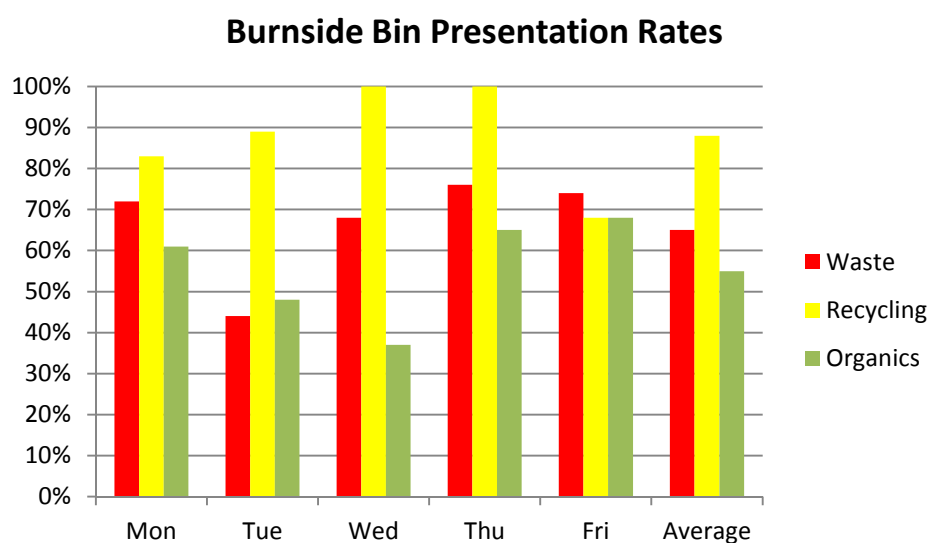
Appendix D: Diversion Rate Data

Appendix E: Organics Bin Contaminants

### 5.1 Bin Presentation Rates

The number of bins presented as part of the targeted sample was recorded as bins were tagged on the morning of collection. Where a bin was not presented, a replacement bin was tagged for collection to ensure a complete sample of 100 bins for each stream.

The average presentation rate for waste bins was 65% with a range of 76% on Thursday down to 44% on Tuesday. For recycling bins the average was 88% with a range of 100% on Wednesday and Thursday down to 68% on Friday. Organics bins recorded an average of 55% presentation rate, ranging from 68% on Friday to 37% on Wednesday.



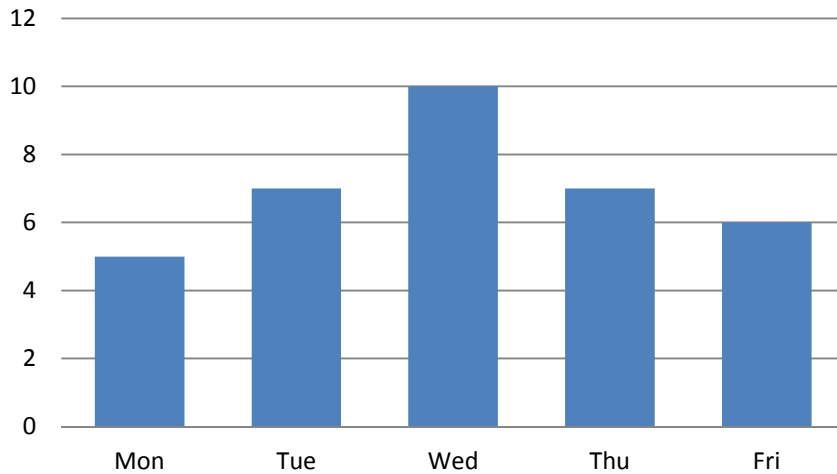
Graph 1: Bin presentation rates by day and weekly average

### 5.2 Bio-bag Program Participation

Participation in the bio-bag program was captured by lifting the lid of the organics bins. A total of 35 households had bio-bags visible in their organics bins. A comparison by collection day is given below. Photos of each bin were taken, and a total of 13 bins had only bio-bags or food in them, recording an estimated bin capacity of only 5 to 10%. All images are supplied separately on disc.



### Visible Biobags in Burnside Organics Bins



Graph 2: Bio-bags visible in organics bins by collection day.

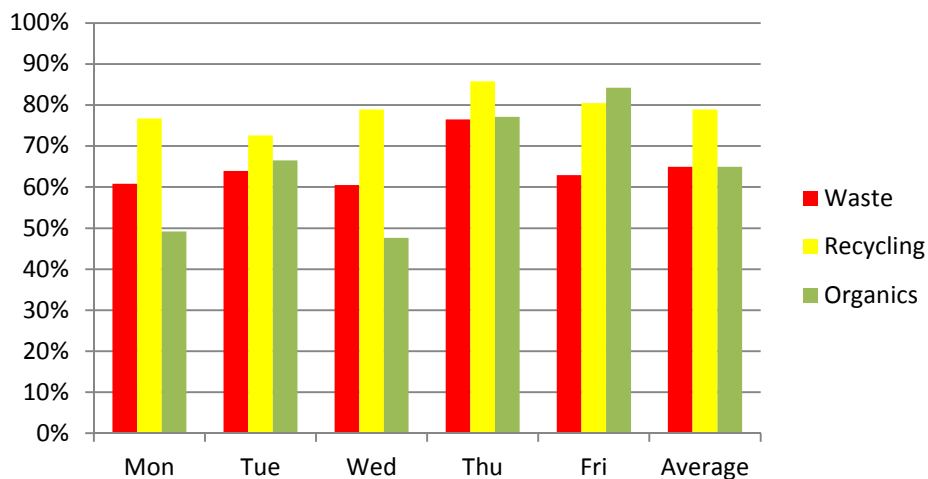


Photos 11, 12 & 13: Bio-bags visible in organics bins at collection

### 5.3 Bin Capacity

The bin capacity is recorded at collection and is an estimate of the percentage full for each bin, averaged over the number of bins collected on each day and then again over the total of 100 bins per stream. The complete analysis is detailed in Appendix B.

### Burnside Average Bin Capacity



Graph 3: Average estimate % bin capacity by day and for the week; all streams.

- Waste bins were 65% full on average with a range of 5% to 100%,
- Recycling bins ranged from 10% to 100% full, averaging 79% over the week and
- Organics bins were on average 65% full and ranged from 5% to 100% full.



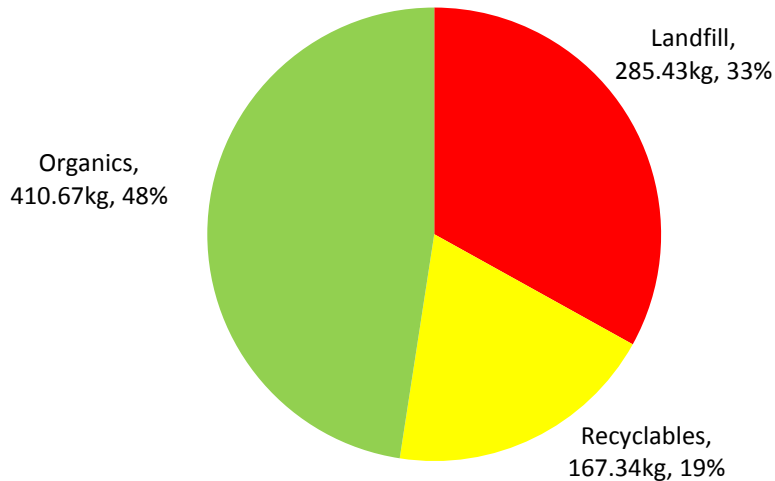
Photos 14, 15 & 16: Photo records of organics bins



## 5.4 Residual Waste Bin Audit

- A total of 863.44kg of material from 100 waste bins was audited; an average weight of 8.63kg/hh/wk.
- The total contents of the residual waste bin by weight consisted of 48% organics (including food waste), 19% recyclables and 33% residual waste or landfill.

### Breakdown of Waste Bins (kg)

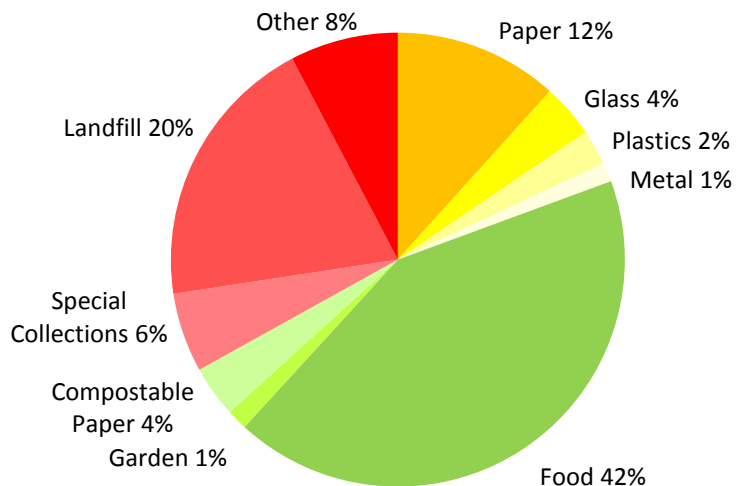


Graph 4: Breakdown of waste bins by weight and percentage.

### 5.4.1 Breakdown of Material Streams in Residual Waste Bins

Waste bin materials are broken down further into broad categories in the graph below:

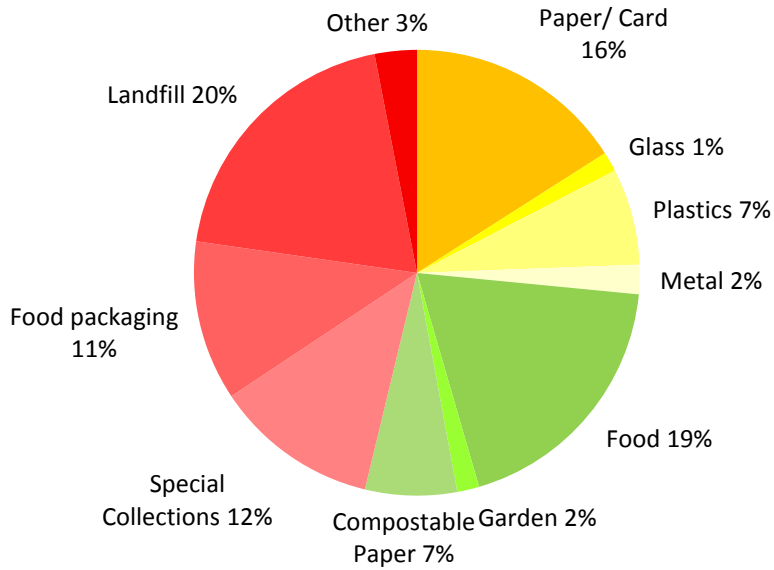
### Broad Category Breakdown of Waste Bins (kg)



Graph 5: Breakdown of waste bins by broad sub-categories (kg)

The breakdown by volume is given below as a comparison with food packaging included as this is a significant percentage of the volume though it weighs very little:

## Broad Category Breakdown of Waste Bins (L)



Graph 6: Breakdown of waste bins by broad sub-categories (L)

Some materials can potentially be diverted from landfill through special collections and these were recorded separately;

- E-waste
- Clean film plastic
- Textiles and other reusable items
- Miscellaneous metal.

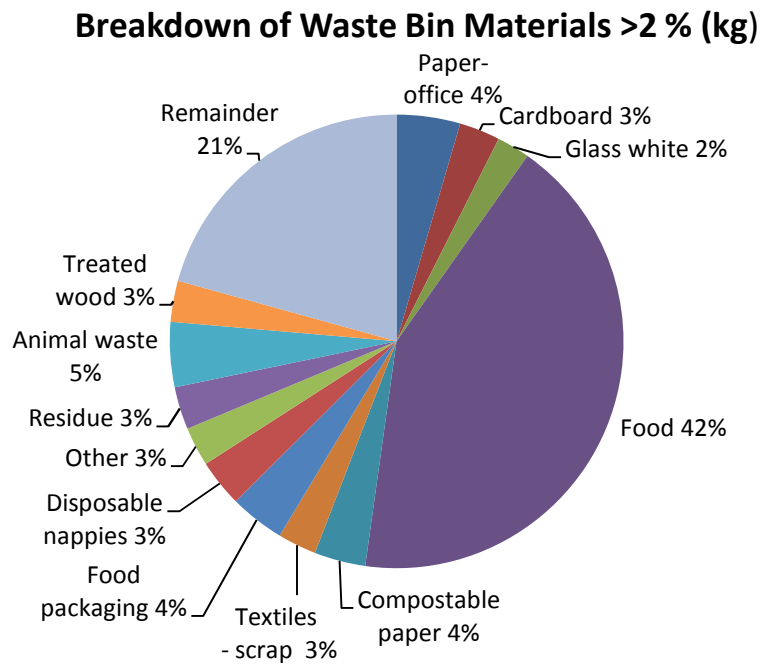
Residual waste bin materials recorded as 'Other' may be reduced through education programs to divert from landfill, including:

- Kitty litter and dog poo can be put in the organics bins if it is a compostable kitty litter and any poo is either loose or in compostable bags
- Paint tins can go in the recycling bin once the residue is hardened and removed.



Photos 17, 18 & 19: Bagged pet waste, good quality textiles and electronic materials in waste bins

Materials in waste bins that equate to greater than 2% by weight are graphed below:



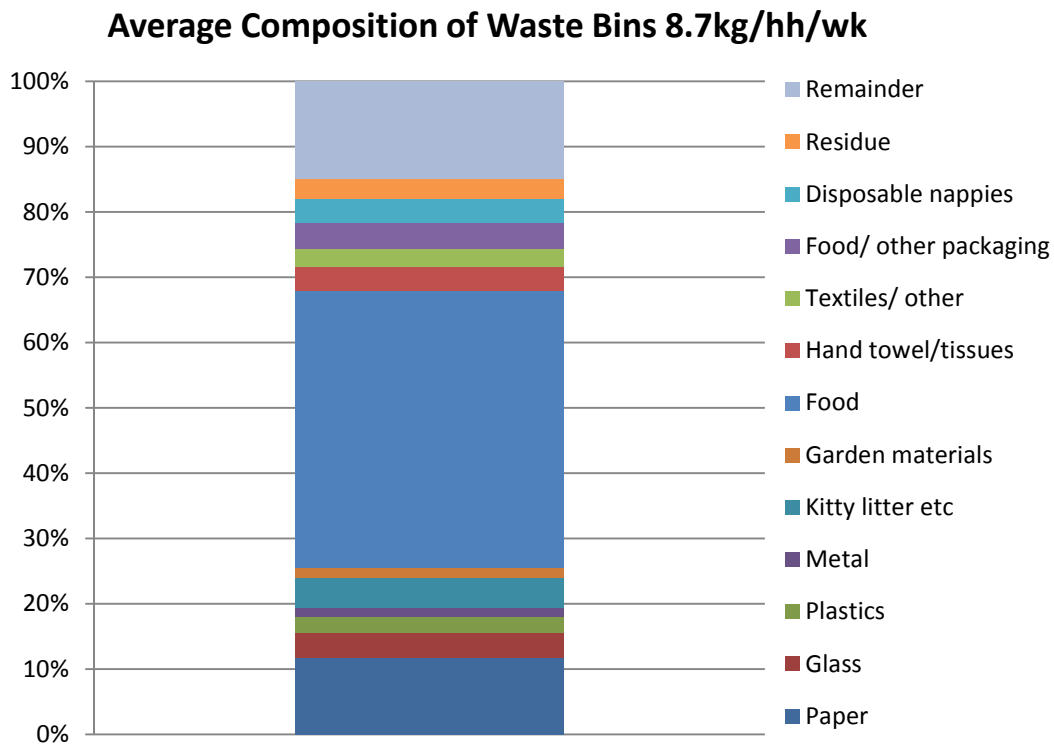
Graph 7: Categories > 2% by weight in waste to landfill bins, 2013.

- An unusually large quantity of office quality paper was disposed to landfill in the Tuesday collection, some of it in plastic sleeves
- Cardboard consists largely of food packaging cardboard and toilet rolls
- White glass is largely food jars and bottles with residue; just under 14kg in the Friday load made up the bulk of this
- Food comprises 42% by weight of organic (compostable) materials in the waste bin and can be diverted to the green bin for composting along with tissue, hand towel and food soiled paper bags (compostable paper).
- 'Other' items included jewellery, insulation and a heavy rubber mat
- There was a large amount (25kg) of treated wood in the Friday sample
- Previous audits in other council areas record disposable nappies between 5 and 11% of the load by weight; this figure of 3% is comparatively low.
- Animal waste comprised 8% of Tuesday waste by weight at 22kgs.



Photos 20, 21 and 22: Office paper in Tuesday's load, recyclable cardboard and bagged food in waste loads.

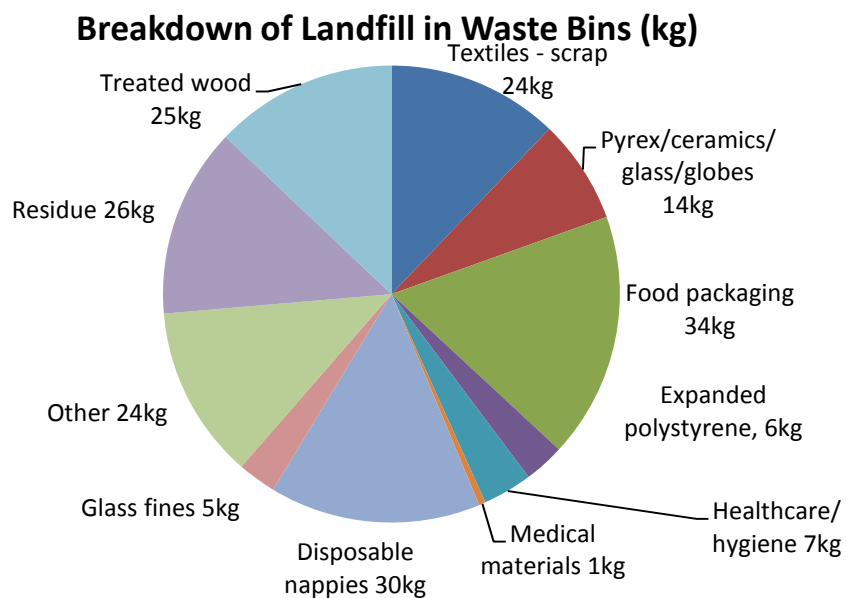
A column graph depicting the average composition of residual waste bins is shown below:



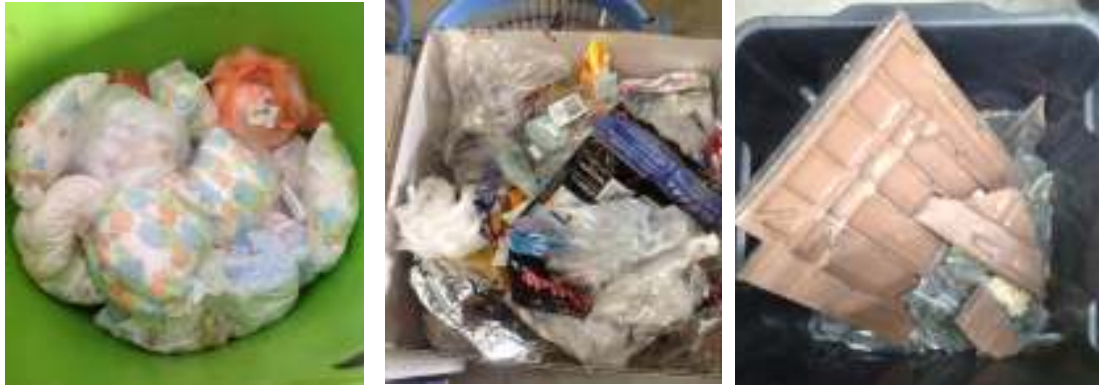
Graph 8: The average composition of an audited waste bin by % kg, 2013

#### 5.4.2 Detailed Breakdown of Landfill Materials in Residual Waste Bins

A breakdown of the materials in the waste bins that can only be landfilled is given below:



Graph 9: Breakdown of landfill materials in general waste bins by % kg.



Photos 23, 24 & 25: Nappies, food packaging and ceramics

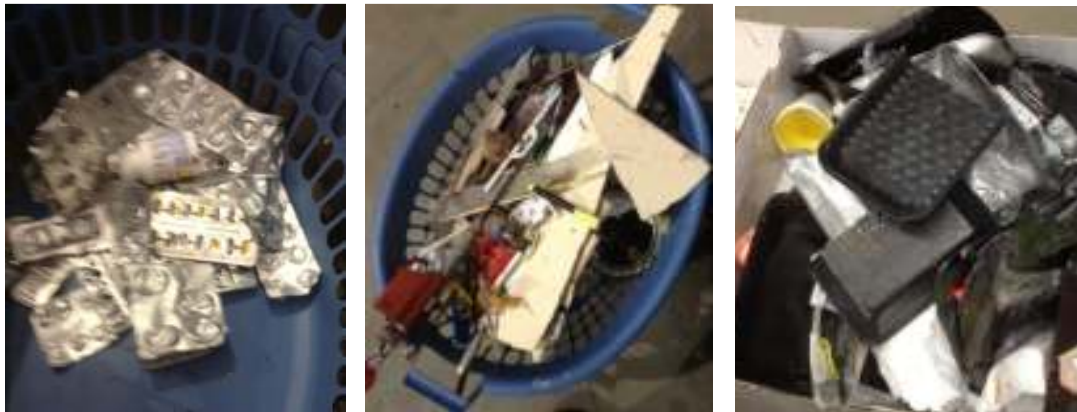


Photo 26,27 and 28: Medical materials, misc. waste bin materials, and expanded polystyrene packaging.

### 5.4.3 Breakdown of Contaminants in Residual Waste Bins

The table below shows the breakdown by weight, volume and kg/hh/wk of recyclable and compostable material in residual waste bins:

Category	Weight (Kg)	%kg	Volume (L)	%L	Kg/hh/wk
Paper – Office	39.10	5%	170	2%	0.39
Cardboard	25.12	3%	600	7%	0.25
<b>Total Paper</b>	<b>100.86</b>	<b>12%</b>	<b>1295</b>	<b>16%</b>	<b>1.01</b>
Glass White	20.26	2%	85	1%	0.20
<b>Total Glass</b>	<b>33.16</b>	<b>4%</b>	<b>117</b>	<b>1%</b>	<b>0.33</b>
<b>Total Plastic</b>	<b>21.68</b>	<b>3%</b>	<b>567</b>	<b>7%</b>	<b>0.22</b>
<b>Total Metal</b>	<b>11.64</b>	<b>1%</b>	<b>172</b>	<b>2%</b>	<b>0.12</b>
<b>Total Recyclables</b>	<b>167.34</b>	<b>19%</b>	<b>2151</b>	<b>27%</b>	<b>1.67</b>
<b>Food</b>	<b>366.39</b>	<b>42%</b>	<b>1537</b>	<b>19%</b>	<b>3.66</b>
Compostable Paper	31.50	4%	540	7%	0.32
Other Organics (Garden)	12.78	1%	130	2%	0.13
<b>Total Organics</b>	<b>410.67</b>	<b>48%</b>	<b>2207</b>	<b>27%</b>	<b>4.11</b>

Table 4: Breakdown of recyclable and compostable material in residual waste bins by weight and volume.

- Office paper was confined to the Tuesday load and was clearly a cleanout; the Tuesday recycling load also had a large amount of clean, white office paper.
- Cardboard materials consist of smaller food packaging pieces and toilet rolls
- Glass and metal recyclables are largely generated in the kitchen and seem to be missed due to the need to rinse before recycling
- Total plastics is not a significant weight but occupies a large volume; plastic bottles of all types are recovered for recycling but it is food and personal care tubs and bottles that make up this volume.
- Compostable paper was found consistently in bio-bags, indicating that the message to compost low quality and contaminated paper is heeded by those using the bio-bag system but, like food, there are still significant quantities to divert from waste
- Garden organics are successfully diverted from this stream.



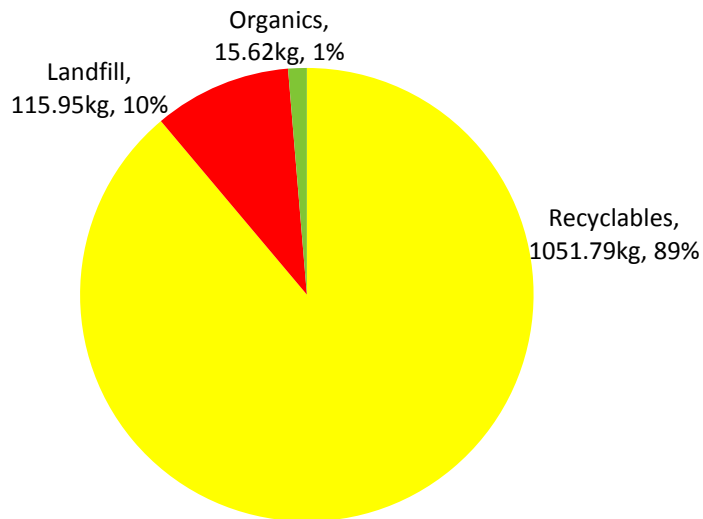
Photos 29, 30 & 31: Compostable paper, glass jars and bottles and food in residual waste collections.



## 5.5 Recycling Bin Audit

- The total amount of material audited from 100 recycling bins was 1183.36kgs giving an average weight of 11.83kg/hh/fortnight or 5.92kg/hh/wk.
- By weight the recycling bins consisted of 89% recyclables, 10% residual waste or landfill and 1% organics.

### Breakdown of Recycling Bins (kg)

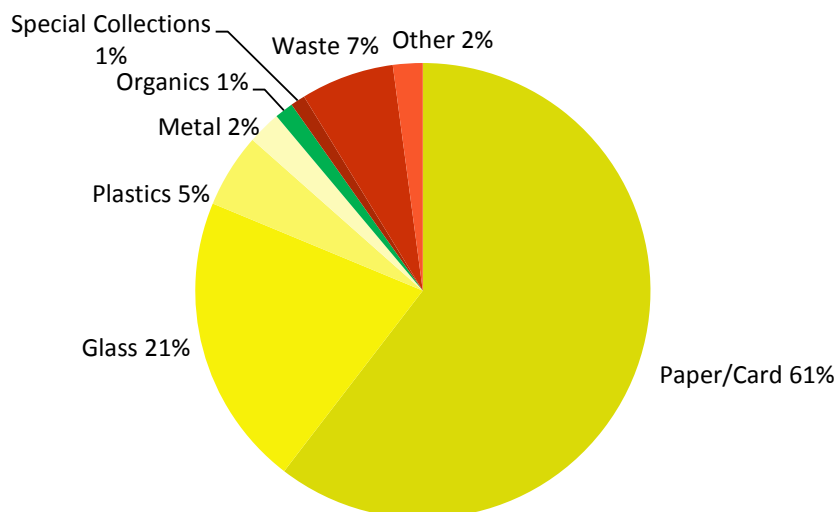


Graph 10: Breakdown of recycling bins by weight and percentage.

### 5.5.1 Breakdown of Material Streams in Recycling Bins

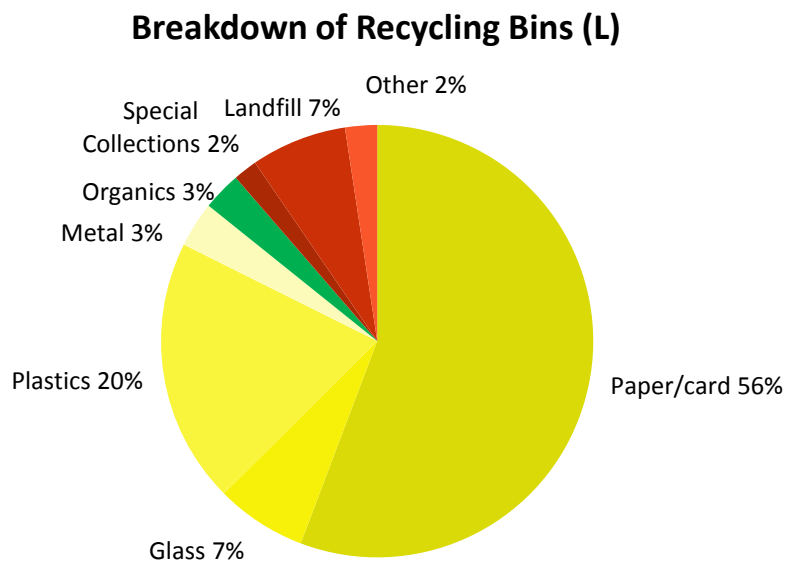
The composition of recycling bin materials by broad sub-categories is given below:

### Broad Category Breakdown of Recycling Bins (kg)



Graph 11: Breakdown of recycling bins by broad sub-categories (kg).

A comparison by volume is depicted in this graph:



Graph 12: Breakdown of recycling bins by broad sub –categories (L)

- Paper and cardboard comprise 69% of recyclable materials
- Plastics have little weight but represent a large volume
- There was a small amount of shredded paper that cannot be recovered unless contained in an envelope for recycling or be disposed to the organics bin
- Bagged materials were a mix of packaging, food and soiled recycling.



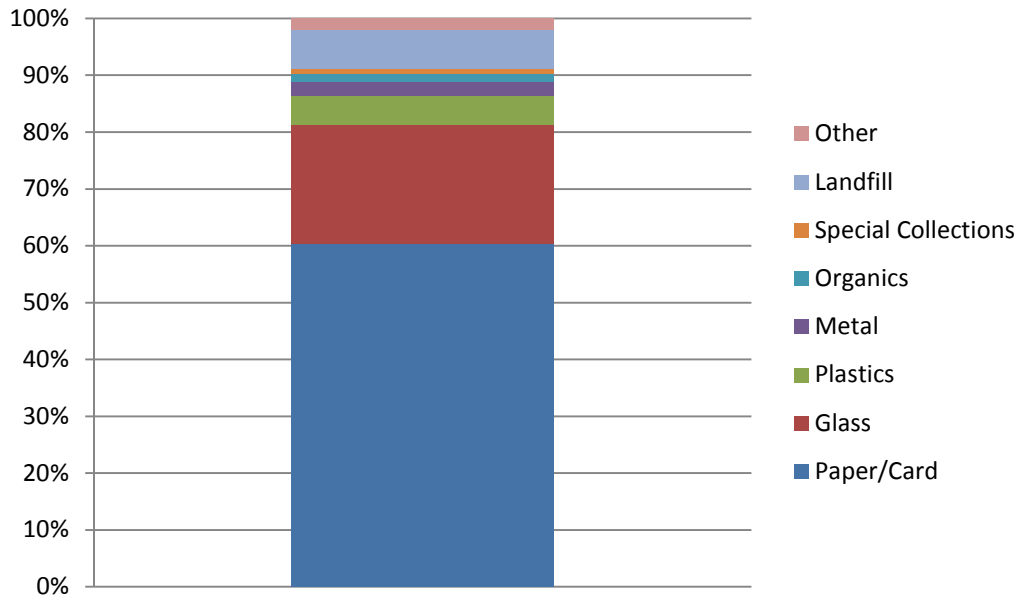
Photos 32, 33 & 34: Tuesday's collection awaiting sort, non – CDL glass, cardboard captured in recycling bins.



Photos 35, 36 & 37: HDPE milk bottles, shredded paper and metal plate.



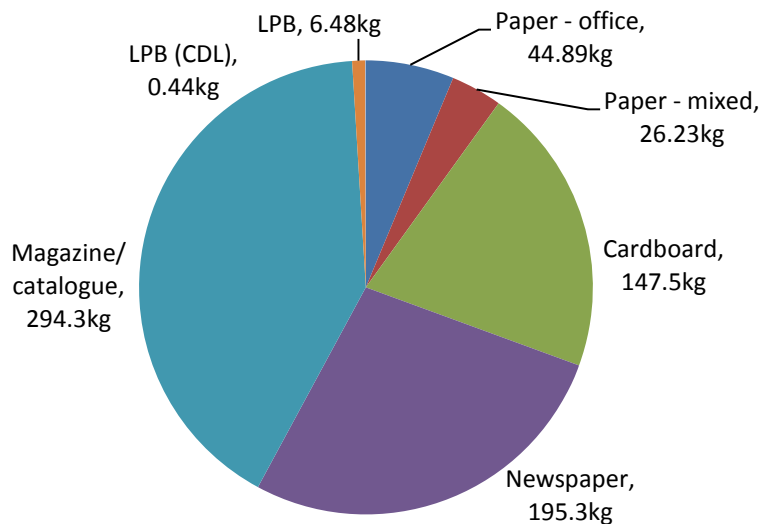
### Ave. Composition of Recycling Bins 5.92kg/hh/wk



Graph 13: The average composition of an audited recycling bin by % kg.

### 5.5.2 Detailed Breakdown of Recyclables in Recycling Bins

#### Breakdown of Paper/Card in Recycling (kg)



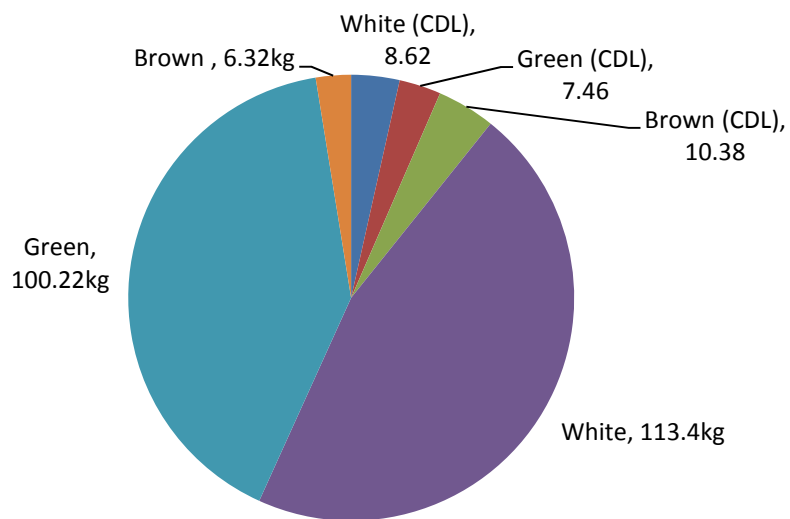
Graph 14: Breakdown of paper/card in recycling loads, kg.

- There were significant amounts of office quality paper in the Tuesday load, correlating to the same collection area that recorded office paper in the waste bin
- The amount of magazines and catalogues is increased due to the dumping of undelivered catalogues in the Tuesday load.

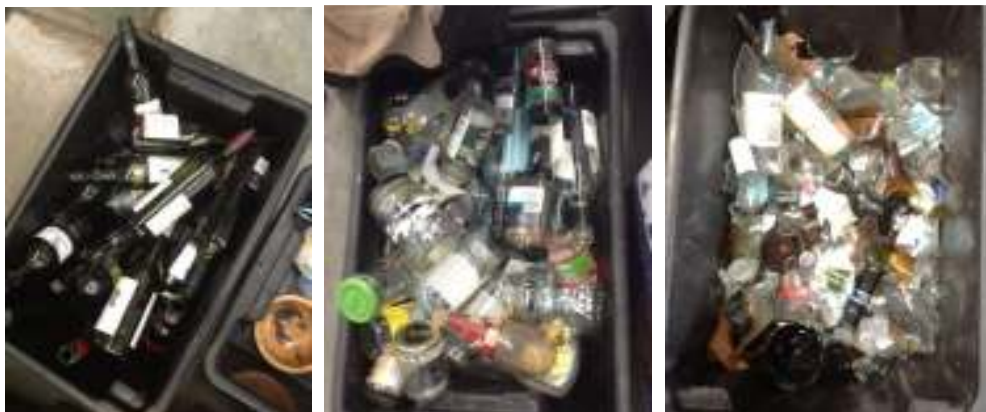


Photos 38, 39 & 40: Office paper in Tuesday's load, undelivered catalogues, LPB cartons.

### Breakdown of Glass in Recycling (kg)



Graph 15: Breakdown of glass in recycling by weight (kg).



Photos 41, 42 & 43: Green wine bottles, white (clear) jars and bottles, broken glass recorded

The table below gives a comparison by weight, volume and kg/hh/wk of the main recycling categories:

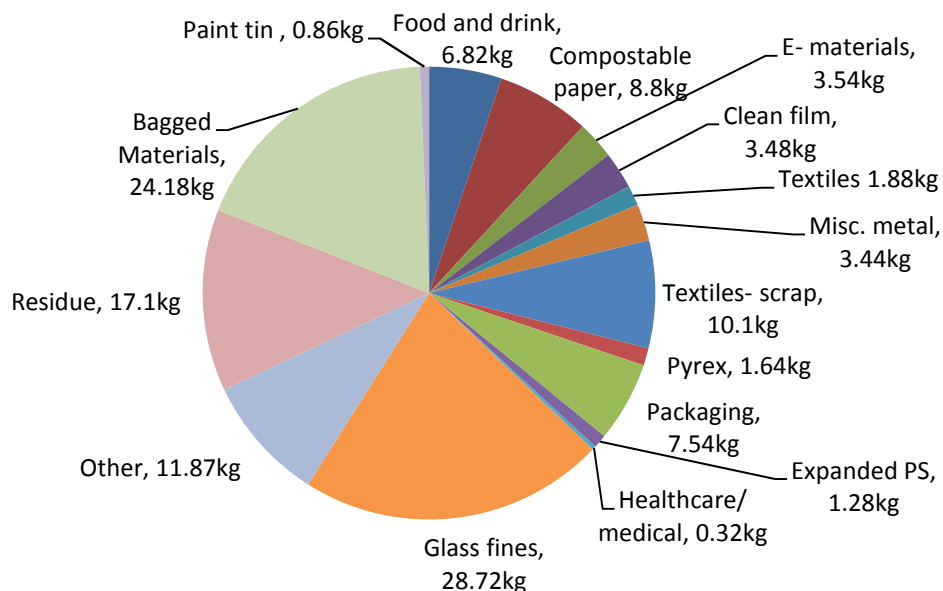
Category	Weight (Kg)	%kg	Volume (L)	%L	Kg/hh/wk
Cardboard	148.50	12%	4000	31%	0.74
Newspaper	195.30	17%	1405	11%	0.98
Magazine/Catalogue	294.30	25%	940	7%	1.47
Liquid Paper Board (LPB)	6.48	1%	275	2%	0.03
White Glass	113.40	10%	433	3%	0.57
Green Glass	100.22	8%	354	3%	0.50
HDPE Milk Bottles	20.40	2%	1120	9%	0.10
PET Bottles (CDL)	7.12	1%	335	3%	0.04
PET (1)	9.68	1%	330	3%	0.05
Polypropylene (5)	9.44	1%	336	3%	0.05
Steel Food Cans	24.00	2%	328	3%	0.12

Table 5: Breakdown of main recycling categories by weight, volume and kg/hh/wk.

### 5.5.3 Breakdown of Contamination in Recycling Bins

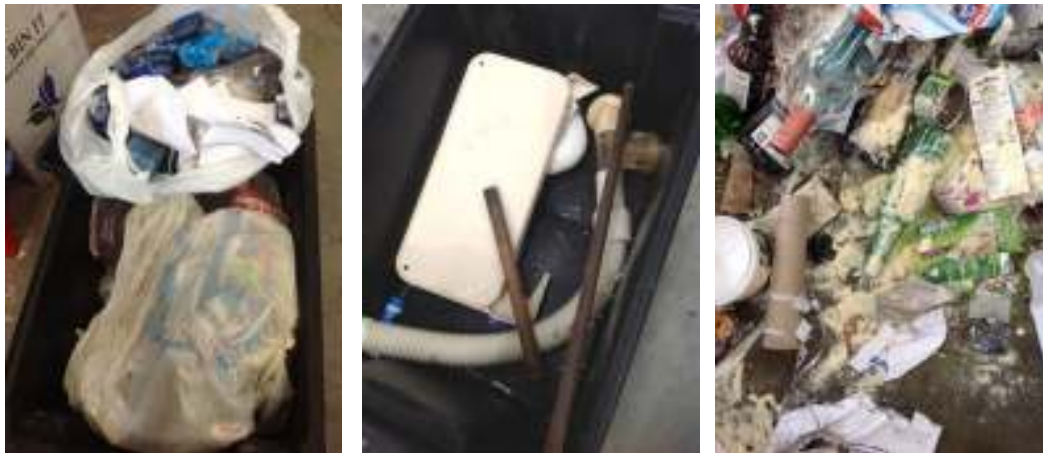
The graph below gives a detailed breakdown of contaminating materials in the recycling loads:

#### Breakdown of Contaminants in Recycling (kg)



Graph 16: Breakdown of contamination in recycling by % weight (kgs).

- Other materials included an esky, vacuum cleaner hose, treated wood, powdered milk residue and a paint tin with residue
- There was a diverse range of contaminants, including one bag of dog poo and bottles with liquid; both of which would affect the collection especially in a compacted load.



Photos 44, 45, & 46: Bagged contamination, Vacuum hose & other materials, powdered milk throughout Friday's collection.



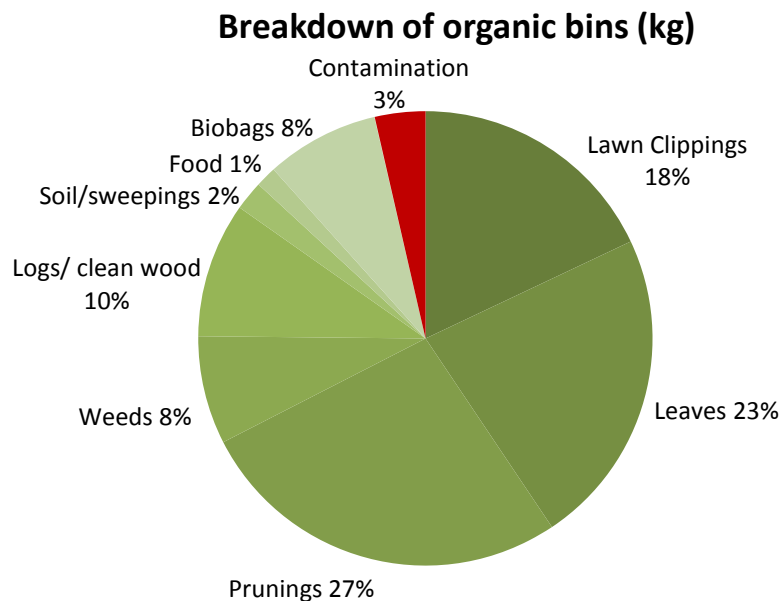
Photos 47, 48, & 49: Electric kettle, other kitchen electronics, paint tin with residue.

## 5.6 Organics Bin Audit

- The total amount of material audited from 100 organics bins was 1950.93kgs, giving an average weight of bins of 19.5kg/hh/fortnight or 9.75kg/hh/wk.
- Contamination with non- organic material was 69.82kg; 3.57% of the total sample and a count of 219 pieces.

### 5.6.1 Breakdown of Organics Bin Materials

The breakdown of all audited materials in the organics bins by weight is given below.



Graph 17: Breakdown of organics bins by % weight (kg).

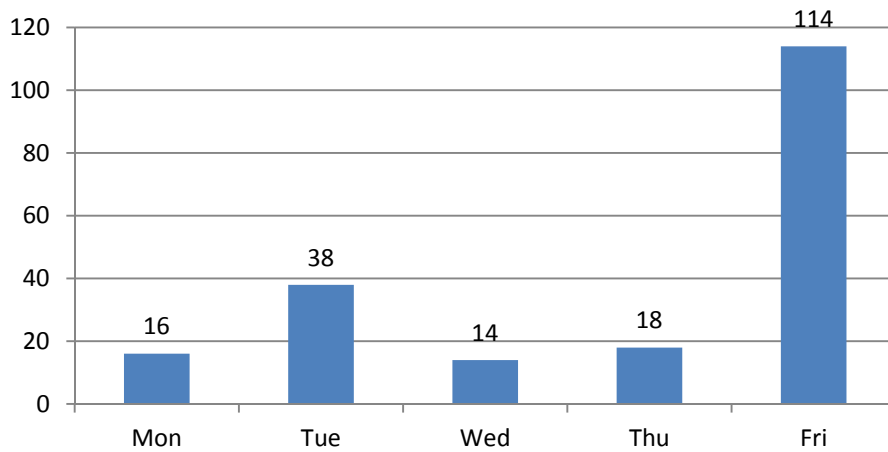


Photos 50, 51 and 52: Logs/clean wood, prunings and compostable paper in organics bin collections.

### 5.6.2 Breakdown of Contamination in Organics Bins

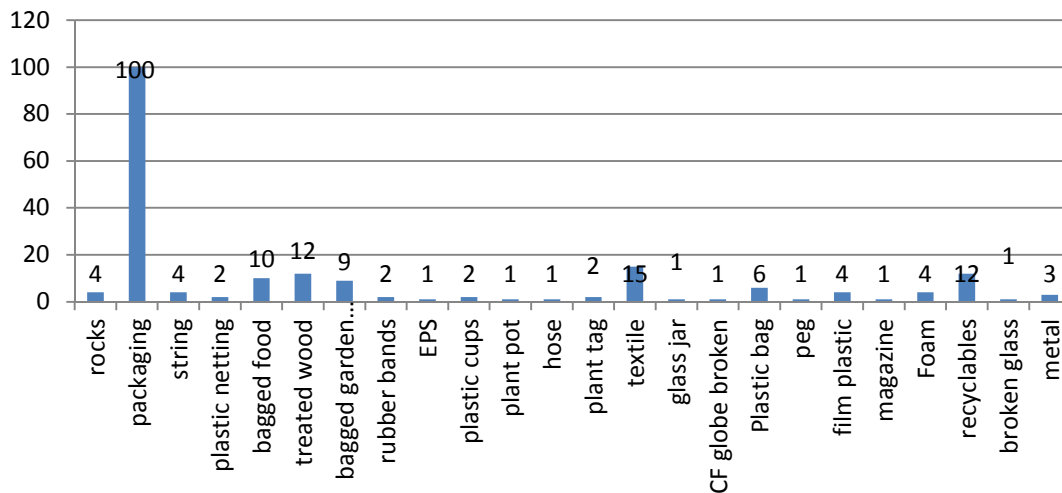
Contaminants were separated and counted for each audited load as they must be manually removed during the commercial composting process. The graphs below give the count by day and a breakdown of the different contaminants:

### Organics Bins Contamination Count



Graph 18: Contamination count in organics bins by day.

### Breakdown of Contamination in Organic Bins



Graph 19: Breakdown of contamination in organics bins.

A full list of contaminants by collection day is included in Appendix E.

- Tuesday’s collection had 33.5kg of bagged garden materials in 4 bags recorded as contamination and though not desirable, would be easily removed in the composting process.
- It is concerning to find glass, broken glass and a broken compact fluorescent globe in the organics load.
- Treated wood and textiles may be mistakenly assumed to be compostable.

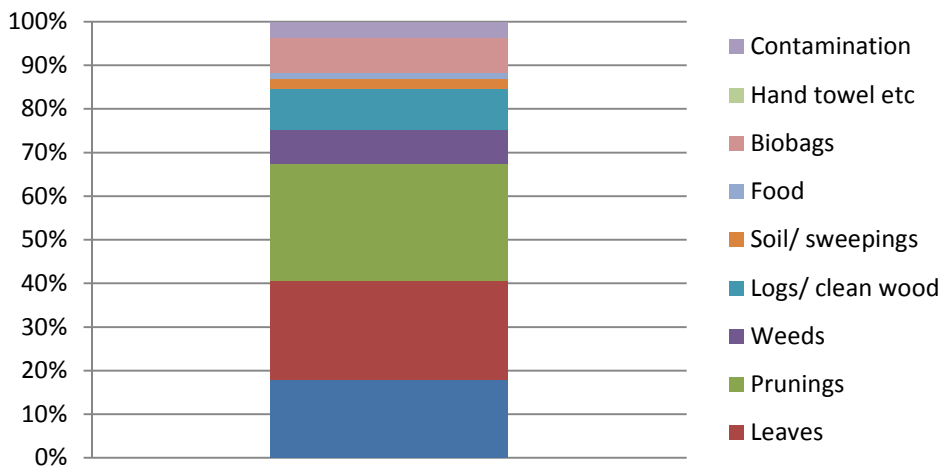




Photos 53, 54, and 55: Bagged contamination (Tuesday), loose contamination, Tuesday and Thursday's loads.

Table 4: Bio-bag plus other organics contamination count by sample day.

### Ave. Composition of Organics Bins 9.75kg/hh/wk



Graph 20: The average composition of an audited organics bin by % kg.

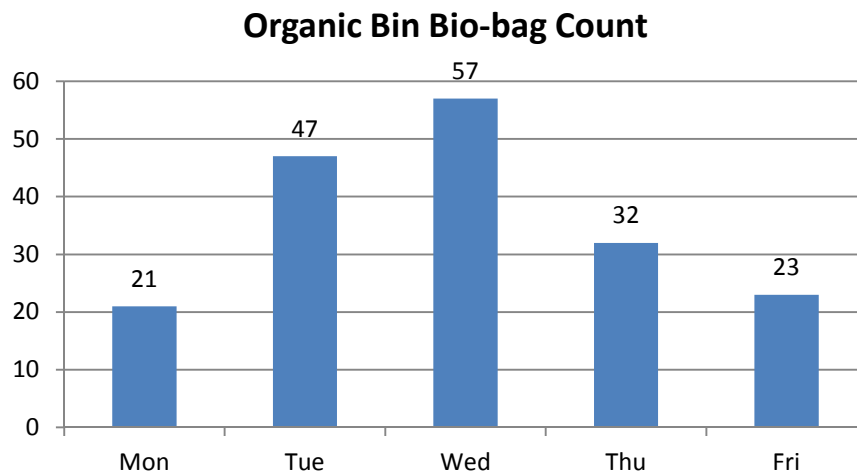
### 5.7 Kitchen Basket Bio-bags

- A total of 180 bio-bags were counted in the organics bins
- 35 organics bins were recorded as having bio-bags visible at collection which equates to an average of just over 5 bio-bags per participating household per fortnight and corresponds to council's recommendation that bags be changed every two to three days.



Photos 56, 57 and 58: Bio-bags in organics bins recorded at collection.

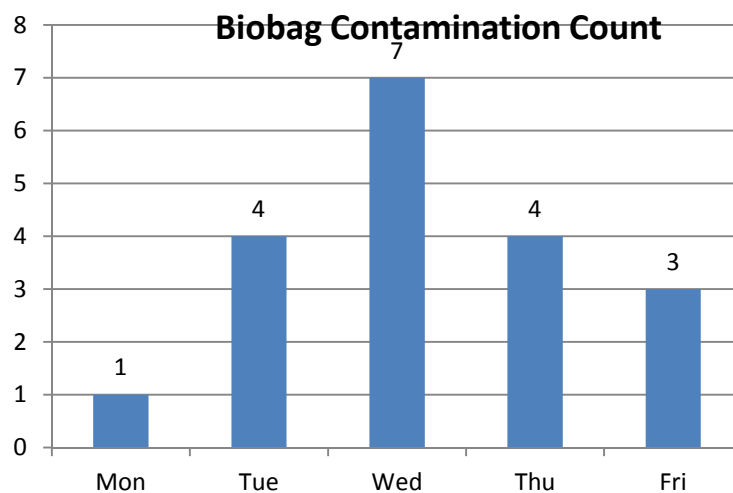
A comparison of the bio-bag count by sample day/ area is given below:



Graph 21: Bio-bag count in organics sample by day.

Bio-bags were split and their contents checked for contamination which was then counted.

See graph below:



Graph 22: Contamination count in bio-bags disposed to organics bins by day.

The contamination levels in bio-bags are very low and for the most part they are used correctly. Contaminants were small items like rubber bands around spinach and spring onion bunches, plastic ties used to tie off the bio-bag and in one collection, the bio-bags themselves were contained in a clear plastic bag.

	Monday	Tuesday	Wednesday	Thursday	Friday	Total
Number of bio-bags	21	47	57	32	23	180
Bio-bag contamination	1	4	7	4	3	19

Table 6: A comparison by day of the number of bio-bags and number of contaminants.



## 6. Comparison of Bin Composition by Collection Day

The table below shows the number of bins collected for each stream from single and multi-unit dwellings. When a targeted bin was not presented, a replacement bin was found to match the ratio of SUDs to MUDs. A discrepancy occurred in the Tuesday waste collection where the target of 7 MUDs was not met for waste bins.

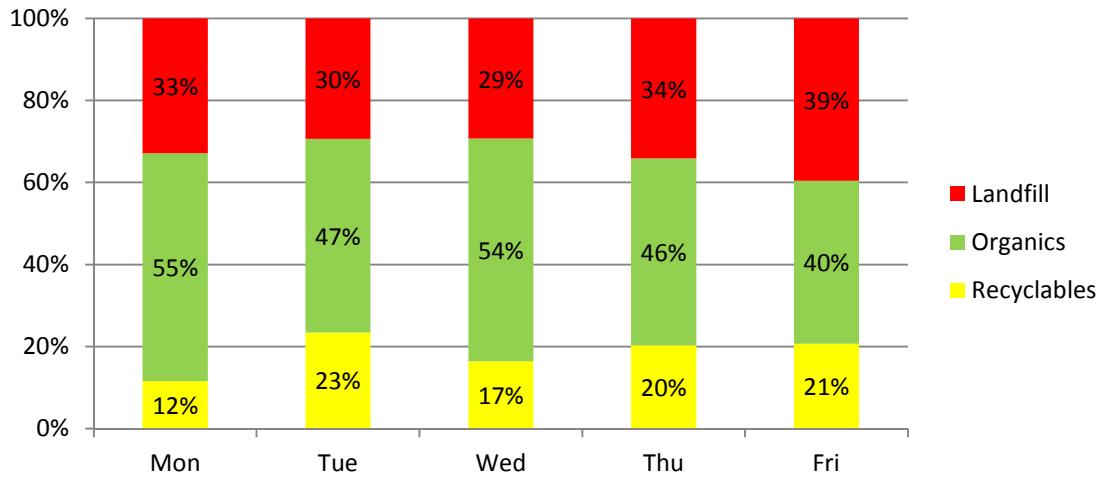
	Suburbs Sampled	SUDs	MUDs	Total
Waste 27.5.13	Kensington Gardens, Kensington Park, Beulah Park	15	3	18
Waste 28.5.13	Auldana, Leabrook, Rosslyn Park	22	5	27
Waste 29.5.13	Rose Park, Toorak Gardens	11	8	19
Waste 30.5.13	Beaumont	17	0	17
Waste 31.5.13	Glenunga, Glen Osmond, Mt Osmond	19	0	19
Total Bins		84	16	100
Organics 27.5.13	Kensington Gardens, Kensington Pk, Beulah Park	15	3	18
Organics 28.5.13	Auldana, Leabrook, Rosslyn Park	20	7	27
Organics 29.5.13	Rose Park, Toorak Gardens	11	8	19
Organics 30.5.13	Beaumont	17	0	17
Organics 31.5.13	Glenunga, Glen Osmond, Mount Osmond	19	0	19
Total Bins		82	18	100
Recycling 3.6.13	Kensington Gardens, Kensington Park, Beulah Park	15	3	18
Recycling 4.6.13	Auldana, Leabrook, Rosslyn Park	20	7	27
Recycling 5.6.13	Rose Park, Toorak Gardens	11	8	19
Recycling 6.6.13	Beaumont	17	0	17
Recycling 7.6.13	Glenunga, Glen Osmond, Mount Osmond	19	0	19
Total Bins		82	18	100

Table 7: Breakdown of dwellings and bin type by collection day and suburbs.

### 6.1 Residual Waste Bins

The following graph gives the percentage breakdown by weight of material in waste bins by collection day:

### Composition of Waste Bins by Collection Day (kg)



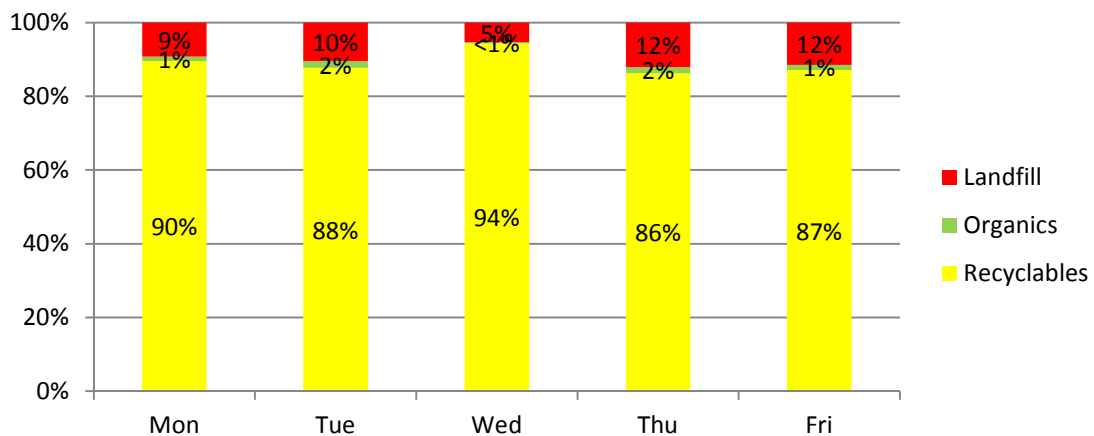
Graph 23: % kg composition of waste bins by collection day.

- The percentage of recycling by weight in the Monday collection was low, giving a comparatively higher percentage of organic material in this collection.
- 60% of bin materials across all collections can be targeted for reduction and comprises food scraps and standard comingled recyclables.

### 6.2 Recycling Bins

The following graph gives the percentage breakdown by weight of recycling bin materials by collection day:

### Composition of Recycling Bins by Collection Day (kg)

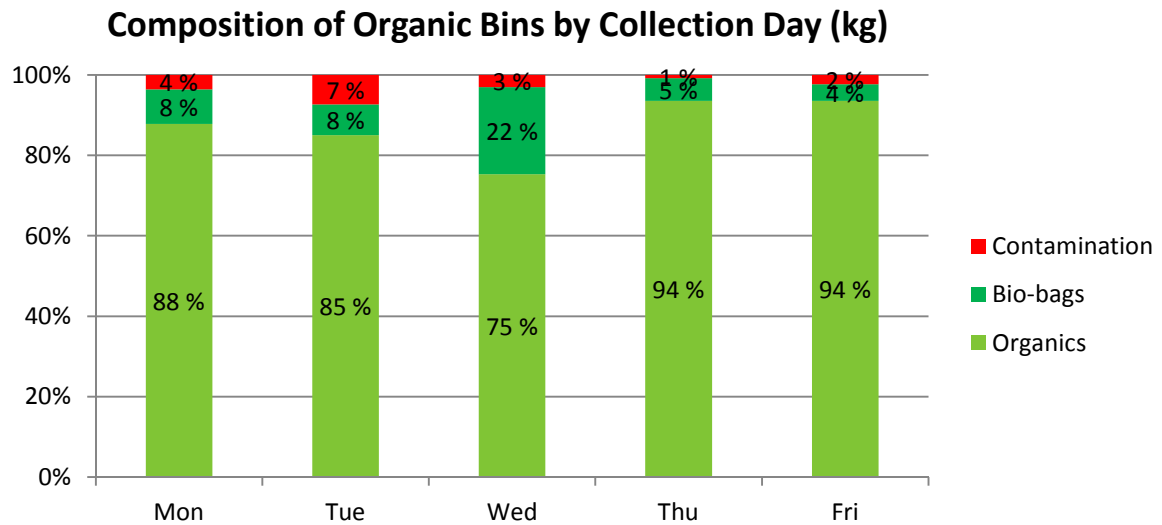


Graph 24: % kg composition of recycling bins by collection day.

- Burnside has achieved a low contamination rate of recycling collections across all areas; organic material is only food and compostable paper, no garden materials
- Landfill materials include broken glass and glass fines which can in part be recovered by VISY Recycling to make a mixed glass product; this category represents 2.43% of the total audited load by weight.

### 6.3 Organics Bins

The following graph gives a percentage breakdown of organics bins across all collection days:



Graph 25: % kg composition of organics bins by collection day.

- Tuesday contamination is affected by the weight of the four bags of garden materials (34kg)
- 10 of the 18 bins collected on Wednesday had visible bio-bags and the total count on this day was 57.

## 7. Bio-bags and food diversion program

Bio-bags were counted and split to record contents across all collections. In waste collections the contents were noted and then sorted to relevant categories and bio-bags in organics collections were split and any contaminants removed, counted and recorded.

### 7.1 Bio-bags across all streams

Bio-bags were present in waste collections on Monday (a count of 5), Tuesday (7) and Wednesday (5) to a total of 17. They contained a variety of materials including personal hygiene products and packaging.

- Four bio-bags in Tuesday's collection contained food scraps only, indicating they had been used for their intended purpose but incorrectly disposed.
- There were no bio-bags identified in the recycling collections.

Bio-bags in organics had an average weight of just less than 1 kg per bag, ranging from 0.78kg on Thursday to 0.92 kg per bag on Monday.



Photos 59, 60, and 61: Monday, Tuesday and Wed bio-bags in waste in order

### 7.2 Comparison with Food Trial in 2005/2006

The Burnside Bio-Organics Trial in 2005/2006 comprised 1,775 households located across six suburbs. Participants were furnished with educational materials and their organics collections were changed to fortnightly for the trial period. It should be noted that green bins for organics collection were not provided freely to all residents at the time; a fee was charged for this service.

Audit results from the trial showed:

- 75% of households presented an organics bin at kerbside for collection
- 80% of those placed food waste in the green organics bin (i.e. used the system)
- For the audited trial area, 60% (80% of 75%) of households used the system
- Overall (including non-participants) the kerbside audit results show that 36.3% of organic food waste material was diverted to the green organics stream.
- The average food waste presented in the green organics stream was 2.47kg per household per fortnight

- Contamination rates of organics bins was 2.79% by weight
- A contamination rate within the liner-bags was negligible by weight and where it was found to be present, predominantly comprised incidental wrappers (e.g. cling film).

A comparison of these results with the 2013 audit is given below:

Parameter	2005/2006 Trial	2013 Audit
Number of bins audited	245	100
h/h's with bio-bag system	1,775	18,925
Presentation rate	75%	55%
Visible food/bio-bags	80%	35%
Participants	60%	19%
Ave. food scraps per fortnight	2.47kg/hh/fortnight	1.86kg/hh/fortnight
Ave. food scraps per week	1.24kg/hh/week	0.93kg/hh/wk
% Food scraps diverted	36.3%	25%
Organics contamination %kg	2.79%	3.57%

Table 8: A comparison of the main parameters identified in the 2005/6 trial with 2013 audit results

The results from the trial represent a different set of circumstances to the council wide roll-out of the kitchen basket system and subsequent audit in 2013.

- Trial participants were given a fortnightly collection for the express purpose of collecting diverted food scraps, educated extensively and surveyed about the system
- Only organics bins were audited from trial participants.

## 8. Diversion Rates

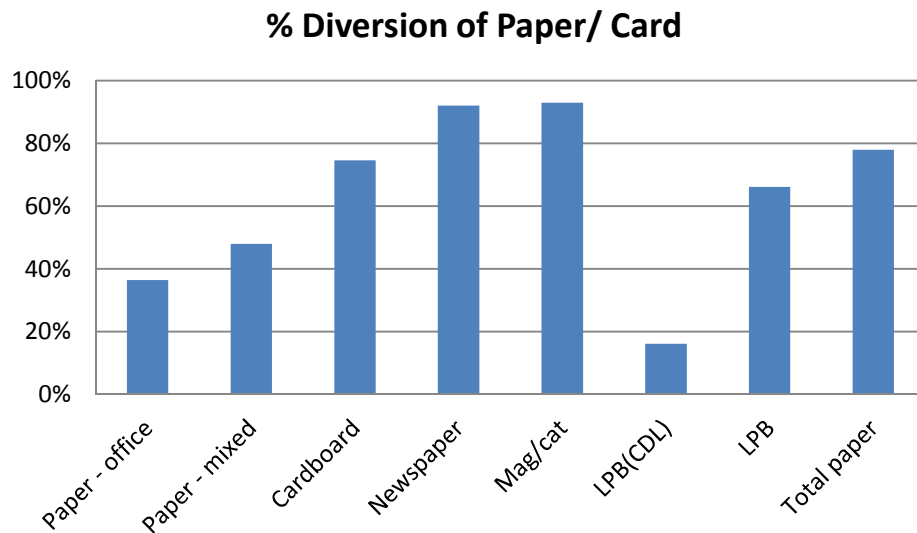
The total amount of recyclable or compostable materials diverted from landfill through the three bin system is calculated from the raw data from the council wide audit, adjusting for frequency of collection.

Diversion rate =  $\frac{\text{Weight of correctly disposed recycling and organics}}{\text{Total weight of all bins from all streams}} \times 100$

$$= \frac{1051.79 + 1881.11}{(863.44 \times 2) + 1183.36 + 1950.93} \times 100$$

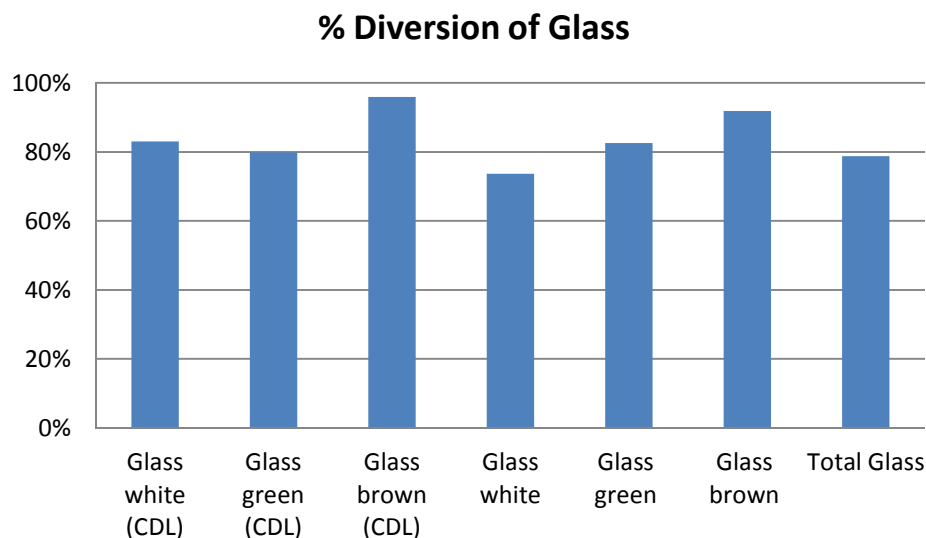
= 60% of all materials (by weight) diverted from landfill.

The graph below gives the percentage diversion of all paper/card categories:



Graph 26: % Diversion of paper/ card from landfill by weight, all categories.

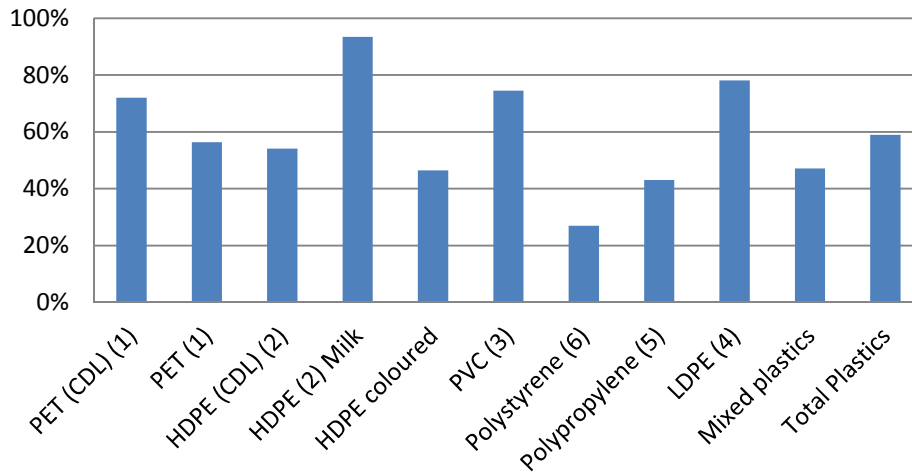
Glass diversion is depicted below for all categories:



Graph 27: % Diversion of glass from landfill by weight, all categories.

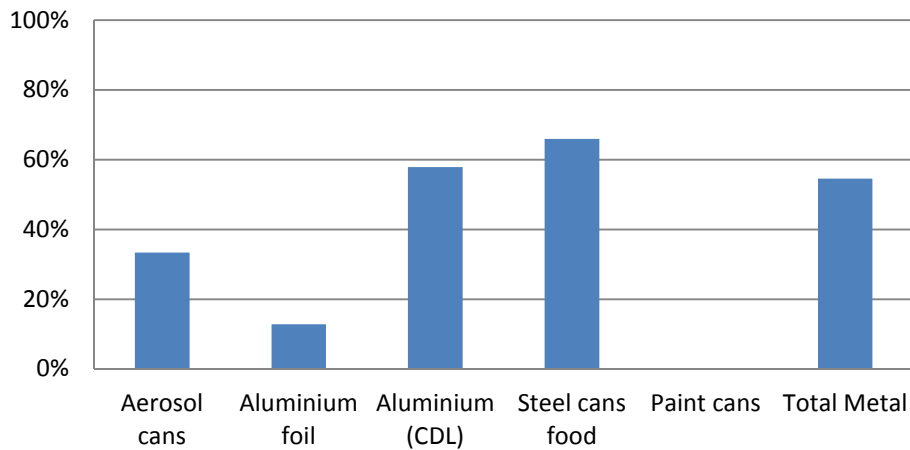
Rigid plastics, metal and organics diversions are depicted below for all categories:

### % Diversion of Rigid Plastics



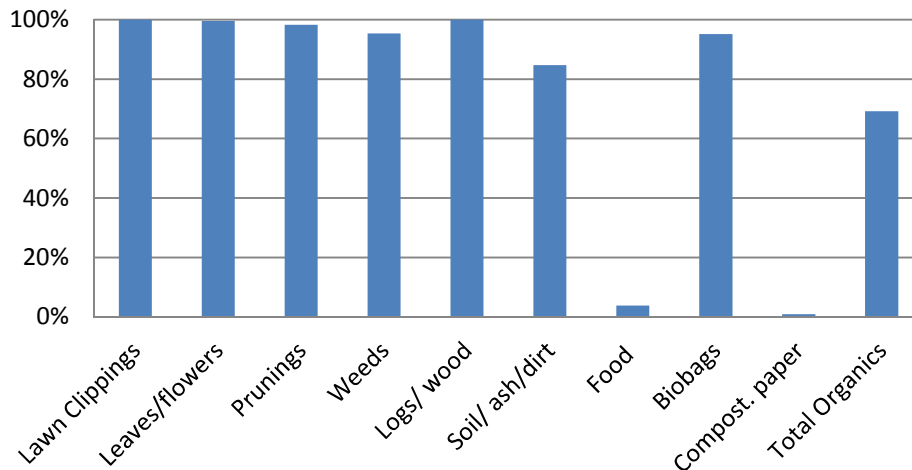
Graph 28: % Diversion of rigid plastics from landfill by weight, all categories.

### % Diversion of Metal



Graph 29: % Diversion of metal from landfill by weight, all categories.

### % Diversion of Organics



Graph 30: % Diversion of organics from landfill by weight, all categories.

## Appendix A: Burnside Demographics and Sampling Plan

Based on 2011 ABS Census data

Sample Area	Area 1	Area 2	Area 3	Area 4	Area 5 Area	All Sample
Suburbs	Beulah Park Kensington Park Kensington Gardens	Auldana Rosslyn Park Wattle Park Stonyfell Erindale Leabrook Tusmore	Rose Park Toorak Gardens Glenside Eastwood	Hazelwood Park Burnside Beaumont	Linden Park St Georges Frewville Glenunga Glen Osmond Mt Osmond	
Proportion of Council area by tenements	18	27	19	17	19	100
Serviced tenements (residential)	8000	12000	8500	7000	8500	44000
% MUD's	22	9	37	13	11	18
<b>Demographics</b>						
Household size & structure Mean size (no.)	2.4	2.6	2.3	2.4	2.1	2.3
Household income						
Individual	1132	1500	1400	1100	1300	1305
Family	3031	3100	3500	3150	3037	3045
Dwelling type						
% SUDS	78	91	63	87	89	82
% MUDS	22	9	37	13	11	18
<b>Audit Sampling</b>						
SUD's	15	25	10	15	17	82
MUD's	3	2	9	2	2	18
Total bins	18	27	19	17	19	100



## Appendix B: List of Sampled Streets and Visual Inspection

Monday 27.5.13

Address	Suburb	SUD/MUD	Bin type	Collected	Not present	% full
20 Lincoln St	Kensington Gdns	MUD	Waste	1		50
22 Lincoln St	Kensington Gdns	MUD	Waste		1	
14 Lincoln St	Kensington Gdns	MUD	Waste	1		90
3/24 Lincoln St	Kensington Gdns	MUD	Waste	1		20
2 David St	Kensington Gdns	SUD	Waste		1	
1b David St	Kensington Gdns	SUD	Waste	1		100
4 David St	Kensington Gdns	SUD	Waste	1		100
8 David St	Kensington Gdns	SUD	Waste		1	
10 David St	Kensington Gdns	SUD	Waste	1		5
7 McKenna St	Kensington Gdns	SUD	Waste		1	
11 McKenna St	Kensington Pk	SUD	Waste	1		10
13 McKenna St	Kensington Pk	SUD	Waste	1		100
17 McKenna St	Kensington Pk	SUD	Waste	1		100
19 McKenna St	Kensington Pk	SUD	Waste		1	
9 Tobruk Ave	Kensington Pk	SUD	Waste	1		20
13 Tobruk Ave	Kensington Pk	SUD	Waste	1		100
22 Tobruk Ave	Kensington Pk	SUD	Waste	1		80
3 Howard St	Beulah Pk	SUD	Waste	1		20
7 Howard St	Beulah Pk	SUD	Waste	1		70
13 Howard St	Beulah Pk	SUD	Waste	1		60
37 Howard St	Beulah Pk	SUD	Waste	1		50
41 Howard St	Beulah Pk	SUD	Waste	1		20
47 Howard St	Beulah Pk	SUD	Waste	1		100
<b>Totals</b>			<b>18</b>	<b>18</b>	<b>5</b>	<b>61% Ave.</b>

Address	Suburb	SUD/MUD	Bin type	Collected	Not present	% full	Biobags
20 Lincoln St	Kensington Gdns	MUD	Organics	1		60	yes
14 Lincoln St	Kensington Gdns	MUD	Organics	1		30	no
22 Lincoln St	Kensington Gdns	MUD	Organics		1		
24 Lincoln St	Kensington Gdns	MUD	Organics	1		50	no
1b David St	Kensington Gdns	SUD	Organics	1		20	yes
2 David St	Kensington Gdns	SUD	Organics		1		
4 David St	Kensington Gdns	SUD	Organics		1		
6 David St	Kensington Gdns	SUD	Organics	1		20	yes
7 David St	Kensington Gdns	SUD	Organics		1		
8 David St	Kensington Gdns	SUD	Organics		1		
10 David St	Kensington Gdns	SUD	Organics	1		5	no
11 McKenna St	Kensington Pk	SUD	Organics	1		50	yes
13 McKenna St	Kensington Pk	SUD	Organics	1		60	no

17 McKenna St	Kensington Pk	SUD	Organics	1	30	no
19 McKenna St	Kensington Pk	SUD	Organics	1		
9 Tobruk Ave	Kensington Pk	SUD	Organics	1	80	no
13 Tobruk Ave	Kensington Pk	SUD	Organics	1	10	no
22 Tobruk Ave	Kensington Pk	SUD	Organics	1	90	no
3 Howard St	Beulah Pk	SUD	Organics	1	70	no
7 Howard St	Beulah Pk	SUD	Organics	1	30	no
13 Howard St	Beulah Pk	SUD	Organics	1	70	no
37 Howard St	Beulah Pk	SUD	Organics	1	100	no
39 Howard St	Beulah Pk	SUD	Organics	1	100	no
41 Howard St	Beulah Pk	SUD	Organics	1		
47 Howard St	Beulah Pk	SUD	Organics	1	10	yes
<b>Totals</b>			18	18	7	49% Ave. 5

### Monday 3.6.13

Address	Suburb	SUD/ MUD	Bin type	Collected	Not present	% full
20 Lincoln St	Kensington Gds	MUD	Recycling	1		60
22 Lincoln St	Kensington Gds	MUD	Recycling	1		80
24 Lincoln St	Kensington Gds	MUD	Recycling	1		70
2 David St	Kensington Gds	SUD	Recycling		1	
4 David St	Kensington Gds	SUD	Recycling	1		80
6 David St	Kensington Gds	SUD	Recycling	1		100
8 David St	Kensington Gds	SUD	Recycling		1	
10 David St	Kensington Gds	SUD	Recycling	1		30
7 McKenna St	Kensington Pk	SUD	Recycling	1		90
13 McKenna St	Kensington Pk	SUD	Recycling	1		100
19 McKenna St	Kensington Pk	SUD	Recycling	1		60
9 Tobruk Ave	Kensington Pk	SUD	Recycling	1		60
13 Tobruk Ave	Kensington Pk	SUD	Recycling	1		100
22 Tobruk Ave	Kensington Pk	SUD	Recycling	1		70
3 Howard St	Beulah Pk	SUD	Recycling	1		60
7 Howard St	Beulah Pk	SUD	Recycling	1		80
13 Howard St	Beulah Pk	SUD	Recycling		1	
15 Howard St	Beulah Pk	SUD	Recycling	1		90
37 Howard St	Beulah Pk	SUD	Recycling	1		80
41 Howard St	Beulah Pk	SUD	Recycling	1		90
47 Howard St	Beulah Pk	SUD	Recycling	1		80
<b>Totals</b>			18	18	3	76.7 % Ave

Tuesday 28.5.13

Address	Suburb	SUD/MUD	Bin type	Collected	Not present	% full
8 Traminar Way	Auldana	SUD	Waste	1		60
3 Traminar Way	Auldana	SUD	Waste	1		100
9 Traminar Way	Auldana	SUD	Waste	1		90
17 Traminar Way	Auldana	SUD	Waste	1		100
27 Traminar Way	Auldana	SUD	Waste		1	
23 Traminar Way	Auldana	SUD	Waste		1	
31 Traminar Way	Auldana	SUD	Waste		1	
35 Traminar Way	Auldana	SUD	Waste	1		100
8 Rawson Pd Dve	Auldana	SUD	Waste	1		10
10 Rawson Pd Dve	Auldana	SUD	Waste		1	
16 Rawson Pd Dve	Auldana	SUD	Waste		1	
18 Rawson Pd Dve	Auldana	SUD	Waste	1		100
22 Rawson Pd Dve	Auldana	SUD	Waste	1		30
34 Rawson Pd Dve	Auldana	SUD	Waste	1		60
38 Rawson Pd Dve	Auldana	SUD	Waste	1		40
46 Rawson Pd Dve	Auldana	SUD	Waste	1		10
52 Rawson Pd Dve	Auldana	SUD	Waste	1		100
60 Rawson Pd Dve	Auldana	SUD	Waste		1	
66 Rawson Pld Dve	Auldana	SUD	Waste	1		100
1/25 Godfrey Tce	Leabrook	MUD	Waste		1	
28 Godfrey Tce	Leabrook	SUD	Waste	1		40
3/25 Godfrey Tce	Leabrook	MUD	Waste		1	
3/35 Godfrey Tce	Leabrook	MUD	Waste	1		30
1/35 Godfrey Tce	Leabrook	MUD	Waste		1	
5/35 Godfrey Tce	Leabrook	MUD	Waste	1		60
30 Godfrey Tce	Leabrook	SUD	Waste	1		100
10/29 Stanley St	Leabrook	MUD	Waste	1		30
3/29 Stanley St	Leabrook	MUD	Waste	1		100
2/29 Stanley St	Leabrook	MUD	Waste	1		100
7/29 Stanley St	Leabrook	MUD	Waste		1	
1 Park Ave	Rosslyn Pk	SUD	Waste		1	
3 Park Ave	Rosslyn Pk	SUD	Waste	1		70
5 Park Ave	Rosslyn Pk	SUD	Waste	1		80
23 Park Ave	Rosslyn Pk	SUD	Waste		1	
29 Park Ave	Rosslyn Pk	SUD	Waste	1		5
31 Park Ave	Rosslyn Pk	SUD	Waste	1		30
35 Park Ave	Rosslyn Pk	SUD	Waste		1	
48 Park Ave	Rosslyn Pk	SUD	Waste	1		40
41 Park Ave	Rosslyn Pk	SUD	Waste		1	
43 Park Ave	Rosslyn Pk	SUD	Waste	1		40
50 Park Ave	Rosslyn Pk	SUD	Waste		1	
54 Park Ave	Rosslyn Pk	SUD	Waste	1		100
<b>Totals</b>		<b>27</b>		<b>27</b>	<b>15</b>	<b>63.9% Ave</b>

Tuesday 28.5.13

Address	Suburb	SUD/MUD	Bin type	Collected	Not Present	% full	Biobags
8 Traminar Way	Auldana	SUD	Organics	1		100	no
3 Traminar Way	Auldana	SUD	Organics	1		100	no
9 Traminar Way	Auldana	SUD	Organics	1		100	no
17 Traminar Way	Auldana	SUD	Organics	1		100	no
23 Traminar Way	Auldana	SUD	Organics		1		
27 Traminar Way	Auldana	SUD	Organics		1		
31 Traminar Way	Auldana	SUD	Organics		1		
35 Traminar Way	Auldana	SUD	Organics	1		10	yes
8 Rawson Pd Dve	Auldana	SUD	Organics	1		10	no
10 Rawson Pd Dve	Auldana	SUD	Organics		1		
16 Rawson Pd Dve	Auldana	SUD	Organics		1		
18 Rawson Pd Dve	Auldana	SUD	Organics	1		100	no
22 Rawson Pd Dve	Auldana	SUD	Organics	1		80	no
34 Rawson Pd Dve	Auldana	SUD	Organics	1		100	yes
38 Rawson Pd Dve	Auldana	SUD	Organics	1		100	no
46 Rawson Pd Dve	Auldana	SUD	Organics	1		100	no
52 Rawson Pd Dve	Auldana	SUD	Organics	1		100	no
60 Rawson Pd Dve	Auldana	SUD	Organics		1		
66 Rawson Pd Dve	Auldana	SUD	Organics	1		50	no
1/13 Godfrey Tce	Leabrook	MUD	Organics	1		50	no
1/25 Godfrey Tce	Leabrook	MUD	Organics		1		
3/25 Godfrey Tce	Leabrook	MUD	Organics	1		30	no
1/35 Godfrey Tce	Leabrook	MUD	Organics		1		
3/35 Godfrey Tce	Leabrook	MUD	Organics		1		
3/13 Godfrey Tce	Leabrook	MUD	Organics	1		50	yes
9/13 Godfrey Tce	Leabrook	MUD	Organics	1		50	no
2/29 Stanley St	Leabrook	MUD	Organics	1		80	no
3/29 Stanley St	Leabrook	MUD	Organics	1		80	no
7/29 Stanley St	Leabrook	MUD	Organics	1		50	no
1 Park Ave	Rosslyn Pk	SUD	Organics		1		
3 Park Ave	Rosslyn Pk	SUD	Organics	1		5	yes
5 Park Ave	Rosslyn Pk	SUD	Organics	1		90	yes
23 Park Ave	Rosslyn Pk	SUD	Organics		1		
29 Park Ave	Rosslyn Pk	SUD	Organics	1		100	no
31 Park Ave	Rosslyn Pk	SUD	Organics	1		100	no
35 Park Ave	Rosslyn Pk	SUD	Organics		1		
48 Park Ave	Rosslyn Pk	SUD	Organics	1		10	yes
41 Park Ave	Rosslyn Pk	SUD	Organics		1		
43 Park Ave	Rosslyn Pk	SUD	Organics	1		10	yes
50 Park Ave	Rosslyn Pk	SUD	Organics		1		
56 Park Ave	Rosslyn Pk	SUD	Organics	1		40	no
<b>Totals</b>		<b>27</b>		<b>27</b>	<b>14</b>	<b>66.48% Average</b>	<b>7</b>

Tuesday 4.6.13

Address	Suburb	SUD/MU D	Bin type	Collected	Not Presented	% full
9 Traminar Way	Auldana	SUD	Recycling	1		80
17 Traminar Way	Auldana	SUD	Recycling	1		100
23 Traminar Way	Auldana	SUD	Recycling		1	
25 Traminar Way	Auldana	SUD	Recycling	1		100
27 Traminar Way	Auldana	SUD	Recycling		1	
35 Traminar Way	Auldana	SUD	Recycling	1		20
31 Traminar Way	Auldana	SUD	Recycling	1		100
10 Rawson Pd Dve	Auldana	SUD	Recycling	1		80
16 Rawson Pd Dve	Auldana	SUD	Recycling	1		90
22 Rawson Pd Dve	Auldana	SUD	Recycling	1		50
34 Rawson Pd Dve	Auldana	SUD	Recycling	1		90
38 Rawson Pd Dve	Auldana	SUD	Recycling	1		80
46 Rawson Pd Dve	Auldana	SUD	Recycling	1		10
52 Rawson Pd Dve	Auldana	SUD	Recycling	1		60
60 Rawson Pd Dve	Auldana	SUD	Recycling	1		60
1/25 Godfrey Tce	Leabrook	MUD	Recycling	1		80
3/25 Godfrey Tce	Leabrook	MUD	Recycling	1		90
1/35 Godfrey Tce	Leabrook	MUD	Recycling	1		90
3/35 Godfrey Tce	Leabrook	MUD	Recycling	1		50
2/29 Stanley St	Leabrook	MUD	Recycling	1		70
3/29 Stanley St	Leabrook	MUD	Recycling	1		80
7/29 Stanley St	Leabrook	MUD	Recycling	1		100
1 Park Ave	Rosslyn Pk	SUD	Recycling	1		100
5 Park Ave	Rosslyn Pk	SUD	Recycling	1		60
23 Park Ave	Rosslyn Pk	SUD	Recycling	1		30
29 Park Ave	Rosslyn Pk	SUD	Recycling	1		30
33 Park Ave	Rosslyn Pk	SUD	Recycling	1		80
35 Park Ave	Rosslyn Pk	SUD	Recycling		1	
41 Park Ave	Rosslyn Pk	SUD	Recycling	1		80
50 Park Ave	Rosslyn Pk	SUD	Recycling	1		100
<b>Totals</b>			27	27	3	72.6% ave

Wednesday 29.5.13

Address	Suburb	SUD/ MUD	Bin type	Collected	Not present	% full
12 Swaine Ave	Rose Park	SUD	Waste	1		90
22 Swaine Ave	Rose Park	SUD	Waste		1	
24 Swaine Ave	Rose Park	SUD	Waste	1		80
34 Swaine Ave	Rose Park	SUD	Waste	1		50
42 Swaine Ave	Rose Park	SUD	Waste	1		40
66 Swaine Ave	Rose Park	SUD	Waste		1	
68 Swaine Ave	Rose Park	SUD	Waste	1		90
84 Swaine Ave	Rose Park	SUD	Waste		1	
86 Swaine Ave	Rose Park	SUD	Waste	1		50
96 Swaine Ave	Rose Park	SUD	Waste	1		90
108 Swaine Ave	Rose Park	SUD	Waste		1	
110 Swaine Ave	Rose Park	SUD	Waste	1		20
13 Watson Ave	Rose Park	SUD	Waste	1		50
23 Watson Ave	Rose Park	SUD	Waste		1	
27 Watson Ave	Rose Park	SUD	Waste	1		80
33 Watcson Ave	Rose Park	SUD	Waste		1	
37 Watson Ave	Rose Park	SUD	Waste	1		90
53 Alexandra Ave Nth	Toorak Gdns	MUD	Waste	1		40
53 Alexandra Ave Nth	Toorak Gdns	MUD	Waste	1		30
53 Alexandra Ave Nth	Toorak Gdns	MUD	Waste	1		10
80 Alexandra Ave Nth	Toorak Gdns	MUD	Waste	1		50
80 Alexandra Ave Nth	Toorak Gdns	MUD	Waste	1		70
82 Alexandra Ave Nth	Toorak Gdns	MUD	Waste	1		100
82 Alexandra Ave Nth	Toorak Gdns	MUD	Waste	1		50
82 Alexandra Ave Nth	Toorak Gdns	MUD	Waste	1		70
<b>Totals</b>		<b>19</b>		<b>19</b>	<b>6</b>	<b>60.53 % Average</b>

Wednesday 29.5.13

Address	Suburb	SUD /MUD	Bin type	Collected	Not present	% full	Biobags
12 Swaine Ave	Rose Park	SUD	Organics	1		30	yes
22 Swaine Ave	Rose Park	SUD	Organics		1		
24 Swaine Ave	Rose Park	SUD	Organics	1		70	no
34 Swaine Ave	Rose Park	SUD	Organics	1		100	no
42 Swaine Ave	Rose Park	SUD	Organics	1		80	yes
66 Swaine Ave	Rose Park	SUD	Organics		1		
68 Swaine Ave	Rose Park	SUD	Organics	1		40	no
84 Swaine Ave	Rose Park	SUD	Organics		1		
86 Swaine Ave	Rose Park	SUD	Organics	1		10	yes
96 Swaine Ave	Rose Park	SUD	Organics	1		40	yes
108 Swaine Ave	Rose Park	SUD	Organics		1		
110 Swaine Ave	Rose Park	SUD	Organics	1		90	no
13 Watson Ave	Rose Park	SUD	Organics	1		50	yes

23 Watson Ave	Rose Park	SUD	Organics		1		
27 Watson Ave	Rose Park	SUD	Organics	1		70	no
33 Watson Ave	Rose Park	SUD	Organics		1		
37 Watson Ave	Rose Park	SUD	Organics	1		60	yes
53 Alexandra Ave Nth	Toorak Gdns	MUD	Organics		1		
53 Alexandra Ave Nth	Toorak Gdns	MUD	Organics	1		5	yes
80 Alexandra Ave Nth	Toorak Gdns	MUD	Organics		1		
80 Alexandra Ave Nth	Toorak Gdns	MUD	Organics		1		
82 Alexandra Ave Nth	Toorak Gdns	MUD	Organics		1		
82 Alexandra Ave Nth	Toorak Gdns	MUD	Organics		1		
82 Alexandra Ave Nth	Toorak Gdns	MUD	Organics		1		
1/88 Alexandra Ave Nth	Toorak Gdns	MUD	Organics	1		60	no
1/88 Alexandra Ave Nth	Toorak Gdns	MUD	Organics	1		60	no
1/88 Alexandra Ave Nth	Toorak Gdns	MUD	Organics	1		10	no
1/88 Alexandra Ave Nth	Toorak Gdns	MUD	Organics	1		10	no
1/88 Alexandra Ave Nth	Toorak Gdns	MUD	Organics	1		20	yes
1/88 Alexandra Ave Nth	Toorak Gdns	MUD	Organics	1		40	yes
1/88 Alexandra Ave Nth	Toorak Gdns	MUD	Organics	1		60	yes
<b>Totals</b>		<b>19</b>		<b>19</b>	<b>12</b>	<b>47.63% Ave.</b>	<b>10</b>

### Wednesday 5.6.13

Address	Suburb	SUD/ MUD	Bin type	Collected	Not presented	% full
12 Swaine Ave	Rose Park	SUD	Recycling	1		100
22 Swaine Ave	Rose Park	SUD	Recycling	1		100
34 Swaine Ave	Rose Park	SUD	Recycling	1		50
42 Swaine Ave	Rose Park	SUD	Recycling	1		100
66 Swaine Ave	Rose Park	SUD	Recycling	1		100
84 Swaine Ave	Rose Park	SUD	Recycling	1		100
96 Swaine Ave	Rose Park	SUD	Recycling	1		80
108 Swaine Ave	Rose Park	SUD	Recycling	1		60
13 Watson Ave	Rose Park	SUD	Recycling	1		100
23 Watson Ave	Rose Park	SUD	Recycling	1		40
33 Watson Ave	Rose Park	SUD	Recycling	1		100
53 Alexandra Ave Nth	Toorak Gdns	MUD	Recycling	1		30
53 Alexandra Ave Nth	Toorak Gdns	MUD	Recycling	1		100
53 Alexandra Ave Nth	Toorak Gdns	MUD	Recycling	1		30
80 Alexandra Ave Nth	Toorak Gdns	MUD	Recycling	1		100
80 Alexandra Ave Nth	Toorak Gdns	MUD	Recycling	1		90
82 Alexandra Ave Nth	Toorak Gdns	MUD	Recycling	1		60
82 Alexandra Ave Nth	Toorak Gdns	MUD	Recycling	1		60
82 Alexandra Ave Nth	Toorak Gdns	MUD	Recycling	1		100
<b>Totals</b>		<b>19</b>		<b>19</b>	<b>0</b>	<b>78.9% Ave</b>



Thursday 30.5.13

Address	Suburb	SUD	Bin type	Collected	Not Presented	% full
11 Royal Ave	Beaumont	SUD	Waste	1		70
17 Royal Ave	Beaumont	SUD	Waste	1		50
27 Royal Ave	Beaumont	SUD	Waste	1		90
31 Royal Ave	Beaumont	SUD	Waste	1		100
27 Lerwick Ave	Beaumont	SUD	Waste		1	
15A Lerwick Ave	Beaumont	SUD	Waste	1		70
21 Lerwick Ave	Beaumont	SUD	Waste	1		50
9 Lerwick Ave	Beaumont	SUD	Waste	1		100
22 Lerwick Ave	Beaumont	SUD	Waste	1		70
5 Milton Ave	Beaumont	SUD	Waste	1		100
9 Milton Ave	Beaumont	SUD	Waste	1		80
14 Milton Ave	Beaumont	SUD	Waste	1		50
15 Caithness Ave	Beaumont	SUD	Waste	1		20
17 Caithness Ave	Beaumont	SUD	Waste	1		60
13 Caithness Ave	Beaumont	SUD	Waste		1	
14 Caithness Ave	Beaumont	SUD	Waste	1		100
20 Caithness Ave	Beaumont	SUD	Waste	1		100
1 Clearview St	Beaumont	SUD	Waste		1	
4 Clearview St	Beaumont	SUD	Waste	1		90
6 Clearview St	Beaumont	SUD	Waste		1	90
7 Clearview St	Beaumont	SUD	Waste	1		10
<b>Totals</b>		<b>17</b>		<b>17</b>	<b>4</b>	<b>72.2% Average</b>

Thursday 30.5.13

Address	Suburb	SUD/M UD	Bin type	Collected	Not Presente d	% full	Biobag s
11 Royal Ave	Beaumont	SUD	Organics	1		20	yes
17 Royal Ave	Beaumont	SUD	Organics	1		80	no
27 Royal Ave	Beaumont	SUD	Organics	1		80	no
31 Royal Ave	Beaumont	SUD	Organics		1		
29a Royal Ave	Beaumont	SUD	Organics	1		100	no
21 Lerwick Ave	Beaumont	SUD	Organics	1		100	no
15a Lerwick Ave	Beaumont	SUD	Organics	1		80	yes
9 Lerwick Ave	Beaumont	SUD	Organics	1		90	yes
22 Lerwick Ave	Beaumont	SUD	Organics	1		100	no
27 Lerwick Ave	Beaumont	SUD	Organics		1		
5 Milton Ave	Beaumont	SUD	Organics	1		100	no
9 Milton Ave	Beaumont	SUD	Organics	1		90	no
14 Milton Ave	Beaumont	SUD	Organics	1		60	yes
13 Caithness Ave	Beaumont	SUD	Organics		1		
14 Caithness Ave	Beaumont	SUD	Organics		1		
17 Caithness Ave	Beaumont	SUD	Organics	1		80	no

15 Caithness Ave	Beaumont	SUD	Organics	1	30	yes
12 Caithness Ave	Beaumont	SUD	Organics	1	100	yes
20 Caithness Ave	Beaumont	SUD	Organics	1	100	no
1 Clearview St	Beaumont	SUD	Organics		1	
6 Clearview St	Beaumont	SUD	Organics		1	
7 Clearview St	Beaumont	SUD	Organics	1	70	no
4 Clearview St	Beaumont	SUD	Organics	1	30	yes
<b>Totals</b>		<b>17</b>		<b>17</b>	<b>6</b>	<b>77.1% Average</b>

#### Thursday 6.6.13

Address	Suburb	SUD/ MUD	Bin type	Collecte d	Not presented	% full
11 Royal Ave	Beaumont	SUD	Recycling	1		50
17 Royal Ave	Beaumont	SUD	Recycling	1		100
27 Royal Ave	Beaumont	SUD	Recycling	1		80
31 Royal Ave	Beaumont	SUD	Recycling	1		100
27 Lerwick Ave	Beaumont	SUD	Recycling	1		50
21 Lerwick Ave	Beaumont	SUD	Recycling	1		90
9 Lerwick Ave	Beaumont	SUD	Recycling	1		40
22 Lerwick Ave	Beaumont	SUD	Recycling	1		30
5 Milton Ave	Beaumont	SUD	Recycling	1		100
9 Milton Ave	Beaumont	SUD	Recycling	1		100
14 Milton Ave	Beaumont	SUD	Recycling	1		80
17 Caithness Ave	Beaumont	SUD	Recycling	1		50
13 Caithness Ave	Beaumont	SUD	Recycling	1		100
14 Caithness Ave	Beaumont	SUD	Recycling	1		100
20 Caithness Ave	Beaumont	SUD	Recycling	1		100
1 Clearview St	Beaumont	SUD	Recycling	1		10
6 Clearview St	Beaumont	SUD	Recycling	1		10
<b>Totals</b>		<b>17</b>	<b>17</b>	<b>17</b>	<b>0</b>	<b>70% Average</b>

Friday 31.5.13

Address	Suburb	SUD/ MUD	Bin type	Collected	Not Presented	% full
2 Hayward Dve	Mt Osmond	SUD	Waste	1		100
4a Hayward Dve	Mt Osmond	SUD	Waste	1		20
15 Hayward Dve	Mt Osmond	SUD	Waste		1	
27 Mt Osmond Rd	Mt Osmond	SUD	Waste	1		50
28 Hayward Dve	Mt Osmond	SUD	Waste		1	
38 Hayward Dve	Mt Osmond	SUD	Waste		1	
1 Bagot St	Glen Osmond	SUD	Waste		1	
2 Bagot St	Glen Osmond	SUD	Waste		1	
18 Brook Ave	Glenunga	SUD	Waste	1		60
14 Brook Ave	Glenunga	SUD	Waste	1		70
10 Brook Ave	Glenunga	SUD	Waste	1		100
6 Brook Ave	Glenunga	SUD	Waste	1		100
9 Jikara Dve	Glen Osmond	SUD	Waste	1		40
17 Jikara Dve	Glen Osmond	SUD	Waste	1		70
25 Jikara Dve	Glen Osmond	SUD	Waste	1		30
20 Gleneagles Rd	Mt Osmond	SUD	Waste	1		5
28 Gleneagles Rd	Mt Osmond	SUD	Waste	1		50
36 Gleneagles Rd	Mt Osmond	SUD	Waste	1		100
44 Gleneagles Rd	Mt Osmond	SUD	Waste	1		100
56 Gleneagles Rd	Mt Osmond	SUD	Waste	1		30
64 Gleneagles Rd	Mt Osmond	SUD	Waste	1		100
70 Gleneagles Rd	Mt Osmond	SUD	Waste	1		60
111 Mt. Osmond Rd	Mt Osmond	SUD	Waste	1		50
117 Mt. Osmond Rd	Mt Osmond	SUD	Waste	1		60
<b>Totals</b>			19	19	5	62.9% Average

Friday 31.5.13

Address	Suburb	SUD/ MUD	Bin type	Collected	Not Presented	% full	Biobags
1 Bagot St	Glen Osmond	SUD	Organics	1		40	no
2 Bagot St	Glen Osmond	SUD	Organics	1		90	yes
18 Brook Ave	Glenunga	SUD	Organics	1		100	no
14 Brook Ave	Glenunga	SUD	Organics	1		100	no
10 Brook Ave	Glenunga	SUD	Organics	1		100	no
6 Brook Ave	Glenunga	SUD	Organics	1		90	yes
9 Jikara Dve	Glen Osmond	SUD	Organics	1		100	yes
17 Jikara Dve	Glen Osmond	SUD	Organics	1		100	no
25 Jikara Dve	Glen Osmond	SUD	Organics	1		20	yes
20 Gleneagles Rd	Mt Osmond	SUD	Organics	1		90	yes
28 Gleneagles Rd	Mt Osmond	SUD	Organics		1		
32 Gleneagles Rd	Mt Osmond	SUD	Organics	1		100	no
36 Gleneagles Rd	Mt Osmond	SUD	Organics	1		100	no
44 Gleneagles Rd	Mt Osmond	SUD	Organics		1		

46 Gleneagles Rd	Mt Osmond	SUD	Organics	1	100	no
56 Gleneagles Rd	Mt Osmond	SUD	Organics	1	100	no
64 Gleneagles Rd	Mt Osmond	SUD	Organics	1	100	no
68 Gleneagles Rd	Mt Osmond	SUD	Organics	1	20	no
70 Gleneagles Rd	Mt Osmond	SUD	Organics		1	
15 Hayward Dve	Mt Osmond	SUD	Organics		1	
27 Hayward Dve	Mt Osmond	SUD	Organics	1	100	no
28 Hayward Dve	Mt Osmond	SUD	Organics		1	
38 Hayward Dve	Mt Osmond	SUD	Organics		1	
111 Mt. Osmond Rd	Mt Osmond	SUD	Organics	1	100	no
117 Mt. Osmond Rd	Mt Osmond	SUD	Organics	1	50	yes
<b>Totals</b>			19	19	6	84.2% Average

### Friday 7.6.13

Address	Suburb	SUD/ MUD	Bin type	Collected	Not presented	% full
1 Bagot St	Glen Osmond	SUD	Recycling	1		80
2 Bagot St	Glen Osmond	SUD	Recycling	1		100
18 Brook Ave	Glenunga	SUD	Recycling	1		100
14 Brook Ave	Glenunga	SUD	Recycling	1		100
10 Brook Ave	Glenunga	SUD	Recycling	1		60
6 Brook Ave	Glenunga	SUD	Recycling	1		80
9 Jikara Dve	Glen Osmond	SUD	Recycling	1		100
17 Jikara Dve	Glen Osmond	SUD	Recycling	1		100
25 Jikara Dve	Glen Osmond	SUD	Recycling	1		70
20 Gleneagles Rd	Mt Osmond	SUD	Recycling	1		100
26 Gleneagles Rd	Mt Osmond	SUD	Recycling	1		70
28 Gleneagles Rd	Mt Osmond	SUD	Recycling		1	
34 Gleneagles Rd	Mt Osmond	SUD	Recycling	1		30
36 Gleneagles Rd	Mt Osmond	SUD	Recycling		1	
44 Gleneagles Rd	Mt Osmond	SUD	Recycling		1	
46 Gleneagles Rd	Mt Osmond	SUD	Recycling	1		70
56 Gleneagles Rd	Mt Osmond	SUD	Recycling	1		100
64 Gleneagles Rd	Mt Osmond	SUD	Recycling	1		80
70 Gleneagles Rd	Mt Osmond	SUD	Recycling	1		80
15 Hayward Dve	Mt Osmond	SUD	Recycling		1	
27 Hayward Dve	Mt Osmond	SUD	Recycling	1		80
28 Hayward Dve	Mt Osmond	SUD	Recycling		1	
38 Hayward Dve	Mt Osmond	SUD	Recycling		1	
113 Mt. Osmond Rd	Mt Osmond	SUD	Recycling	1		30
115 Mt. Osmond Rd	Mt Osmond	SUD	Recycling	1		100
<b>Totals</b>		19	19	19	6	80.5% Average

## Appendix C: Raw Data

### Residual Waste Bins – Weight (Kg)

Material Waste Kgs	Monday	Tuesday	Wednesday	Thursday	Friday	Totals	% Total
Paper - office		39.10				39.10	4.53%
Paper - mixed	2.20	3.70	2.52	2.54	3.26	14.22	1.65%
Cardboard	3.64	4.80	3.22	5.46	8.00	25.12	2.91%
Newspaper	2.38		0.24	3.60	2.18	8.40	0.97%
Magazine/catalogue	1.10	1.62	4.28	2.68	1.54	11.22	1.30%
LPB(CDL)	0.36	0.16	0.40	0.16	0.06	1.14	0.13%
LPB	0.22	0.56	0.06	0.32	0.50	1.66	0.19%
<b>Total Paper</b>	<b>9.90</b>	<b>49.94</b>	<b>10.72</b>	<b>14.76</b>	<b>15.54</b>	<b>100.86</b>	<b>11.68%</b>
Glass white (CDL)					0.88	0.88	0.10%
Glass green (CDL)		0.68			0.26	0.94	0.11%
Glass brown (CDL)			0.22			0.22	0.03%
Glass white	0.86	3.40	0.88	1.54	13.58	20.26	2.35%
Glass green	0.92	3.06		2.66	3.94	10.58	1.23%
Glass brown	0.28					0.28	0.03%
<b>Total Glass</b>	<b>2.06</b>	<b>7.14</b>	<b>1.10</b>	<b>4.20</b>	<b>18.66</b>	<b>33.16</b>	<b>3.84%</b>
PET (CDL) (1)	0.36	0.44	0.36	0.10	0.12	1.38	0.16%
PET (1)	0.96	1.58	0.30	0.50	0.40	3.74	0.43%
HDPE (CDL) (2)		0.02		0.08	0.04	0.14	0.02%
HDPE Milk/opaque	0.24	1.58		0.06	0.18	0.72	0.24%
HDPE coloured	0.92		0.52	1.40	1.26	4.10	0.47%
PVC (CDL) (3)							0.00%
PVC (3)		0.04	0.02		0.08	0.14	0.02%
Polystyrene (6) + 7	0.10	0.16	0.01	0.96	0.40	1.63	0.19%
Polypropylene (5)	1.18	1.38	0.65	1.68	1.34	6.23	0.72%
LDPE (4)		0.14		0.14	0.12	0.40	0.05%
Mixed plastics	0.22	1.26		0.06	0.32	1.86	0.22%
<b>Total Plastics</b>	<b>3.98</b>	<b>6.60</b>	<b>1.86</b>	<b>4.98</b>	<b>4.26</b>	<b>21.68</b>	<b>2.51%</b>
Aerosol cans	0.20	0.28	0.14	0.80	0.08	1.50	0.17%
Aluminium foil	0.24	0.50	0.24	0.36	0.50	1.84	0.21%
Aluminium (CDL)	0.06	0.24	0.06		0.34	0.70	0.08%
Steel cans food	2.02	1.60	1.08	1.50		6.20	0.72%
Steel paint (empty)					1.40	1.40	0.16%
<b>Total Metal</b>	<b>2.52</b>	<b>2.62</b>	<b>1.52</b>	<b>2.66</b>	<b>2.32</b>	<b>11.64</b>	<b>1.35%</b>
<b>Total Recyclables</b>	<b>18.46</b>	<b>66.30</b>	<b>15.20</b>	<b>26.60</b>	<b>40.78</b>	<b>167.34</b>	<b>19.38%</b>
Lawn Clippings							0.00%
Leaves/flowers	0.68	0.26				0.94	0.11%
Prunings	0.16	4.12			0.22	4.50	0.52%
Weeds				3.64		3.64	0.42%
Logs/ clean wood							0.00%
Soil/ ash/ dirt					3.70	3.70	0.43%
Food	80.48	122.47	44.22	50.96	68.26	366.39	42.43%

Biobags						0.00	0.00%
Compostable paper	7.16	6.74	6.24	5.18	6.18	31.50	3.65%
<b>Total Organics</b>	<b>88.48</b>	<b>133.59</b>	<b>50.46</b>	<b>59.78</b>	<b>78.36</b>	<b>410.67</b>	<b>47.56%</b>
E- materials	1.52		3.94	0.94	3.76	10.16	1.18%
Clean film	2.76	3.28	2.80	4.44	1.36	14.64	1.70%
Textiles- re-usables	4.90	9.70	1.24			15.84	1.83%
Misc. metal	2.08	0.64			5.40	8.12	0.94%
<b>Total Special</b>	<b>11.26</b>	<b>13.62</b>	<b>7.98</b>	<b>5.38</b>	<b>10.52</b>	<b>48.76</b>	<b>5.65%</b>
Textiles - scrap	7.54	4.56	4.30	2.90	4.44	23.74	2.75%
Pyrex/ceramics	3.49	5.50		1.64	3.78	14.41	1.67%
Food packaging	4.26	9.70	5.46	7.12	7.42	33.96	3.93%
Expanded PS	0.50	0.84	2.08	1.24	0.94	5.60	0.65%
Healthcare/ hygiene	1.22	2.16	1.20	1.24	0.98	6.80	0.79%
Medical materials	0.24	0.24	0.12	0.22	0.12	0.94	0.11%
Disposable nappies	12.60	6.14	4.70	5.08	0.66	29.18	3.38%
Glass fines	0.48	0.12			4.74	5.34	0.62%
Other	0.28	4.82	1.24	9.42	8.16	23.92	2.77%
Residue	3.38	12.08		5.84	4.98	26.28	3.04%
<b>Total Landfill</b>	<b>33.99</b>	<b>46.16</b>	<b>19.10</b>	<b>34.70</b>	<b>36.22</b>	<b>170.17</b>	<b>19.71%</b>
Kitty litter/ dog	7.16	21.98	0.10	1.94	8.82	40.00	4.63%
Treated wood		1.28		2.12	21.84	25.24	2.92%
Paint tins/ residue				0.58	0.68	1.26	0.15%
<b>Total Other</b>	<b>7.16</b>	<b>23.26</b>	<b>0.10</b>	<b>4.64</b>	<b>31.34</b>	<b>66.50</b>	<b>7.70%</b>
<b>Total</b>	<b>159.35</b>	<b>282.93</b>	<b>92.84</b>	<b>131.10</b>	<b>197.22</b>	<b>863.44</b>	<b>100.00%</b>

### Residual Waste Bins – Volume (L)

Material Waste L	Monday	Tuesday	Wed.	Thursday	Friday	Totals	% Total
Paper - office		170.00				170.00	2.10%
Paper - mixed	45.00	100.00	40.00	50.00	60.00	295.00	3.64%
Cardboard	110.00	110.00	110.00	70.00	200.00	600.00	7.40%
Newspaper	25.00		3.00	15.00	8.00	51.00	0.63%
Magazine/catalog.	14.00	25.00	10.00	30.00	10.00	89.00	1.10%
LPB(CDL)	10.00	1.50	15.00	4.00	1.00	31.50	0.39%
LPB	7.30	35.00	1.20	10.00	5.00	58.50	0.72%
<b>Total Paper</b>	<b>211.30</b>	<b>441.50</b>	<b>179.20</b>	<b>179.00</b>	<b>284.00</b>	<b>1295.00</b>	<b>15.97%</b>
Glass white (CDL)					1.20	1.20	0.01%
Glass green (CDL)		1.00			0.30	1.30	0.02%
Glass brown (CDL)			0.30			0.30	0.00%
Glass white	1.00	15.00	2.00	5.00	62.00	85.00	1.05%
Glass green	2.00	7.00		10.00	10.00	29.00	0.36%
Glass brown	0.50	0.00				0.50	0.01%
<b>Total Glass</b>	<b>3.50</b>	<b>23.00</b>	<b>2.30</b>	<b>15.00</b>	<b>73.50</b>	<b>117.30</b>	<b>1.45%</b>
PET (CDL) (1)	6.00	15.00	10.00	1.00	2.00	34.00	0.42%
PET (1)	50.00	30.00	10.00	15.00	10.00	115.00	1.42%

HDPE (CDL) (2)		0.50		0.70	0.50	1.70	0.02%
HDPE Milk/opaque	8.00	48.00		28.00	7.00	91.00	1.12%
HDPE (2) coloured	15.00		7.00		15.00	37.00	0.46%
PVC (3)		2.00	0.20		1.00	3.20	0.04%
Polystyrene (6) + 7	1.00	3.00	0.20	15.00	8.00	27.20	0.34%
Polypropylene (5)	55.00	50.00	20.20	50.00	40.00	215.20	2.65%
LDPE (4)		1.00		1.00	1.00	3.00	0.04%
Mixed plastics	3.00	15.00		20.00	2.00	40.00	0.49%
<b>Total Plastics</b>	<b>138.00</b>	<b>164.50</b>	<b>47.60</b>	<b>130.70</b>	<b>86.50</b>	<b>567.30</b>	<b>7.00%</b>
Aerosol cans	2.00	2.00	0.50	8.00	0.50	13.00	0.16%
Aluminium foil	8.00	20.00	10.00	5.00	20.00	63.00	0.78%
Aluminium (CDL)	2.00	8.00	1.00		20.00	31.00	0.38%
Steel cans food	20.00	15.00	5.00	15.00	10.00	65.00	0.80%
<b>Total Metal</b>	<b>32.00</b>	<b>45.00</b>	<b>16.50</b>	<b>28.00</b>	<b>50.50</b>	<b>172.00</b>	<b>2.12%</b>
<b>Total Recyclables</b>	<b>384.80</b>	<b>674.00</b>	<b>245.60</b>	<b>352.70</b>	<b>494.50</b>	<b>2151.6</b>	<b>26.54%</b>
Leaves/flowers	10.00	3.00				13.00	0.16%
Prunings		60.00			2.00	62.00	0.76%
Weeds				50.00		50.00	0.62%
Soil/ ash/ dirt					5.00	5.00	0.06%
Food	368.00	492.00	198.00	245.00	234.00	1537.0	18.96%
Biobags (7)						0.00	0.00%
Compost. paper	180.00	100.00	90.00	90.00	80.00	540.00	6.66%
<b>Total Organics</b>	<b>558.00</b>	<b>655.00</b>	<b>288.00</b>	<b>385.00</b>	<b>321.00</b>	<b>2207.0</b>	<b>27.22%</b>
E- materials	8.00		70.50	2.00	10.00	90.50	1.12%
clean film	155.00	180.00	100.00	180.00	70.00	685.00	8.45%
Textiles -re-usables	50.00	80.00	40.00			170.00	2.10%
Misc. metal	5.00	5.00			10.00	20.00	0.25%
<b>Total Special</b>	<b>218.00</b>	<b>265.00</b>	<b>210.50</b>	<b>182.00</b>	<b>90.00</b>	<b>965.50</b>	<b>11.91%</b>
Textiles - scrap	111.00	55.00	70.00	30.00	40.00	306.00	3.77%
Pyrex/ceramics	5.00	8.50		3.00	9.00	25.50	0.31%
Food packaging	170.00	270.00	110.00	220.00	170.00	940.00	11.59%
Expanded PS	60.00	135.00	125.00	100.00	50.00	470.00	5.80%
Health/ hygiene	30.00	40.00	25.00	20.00	18.00	133.00	1.64%
Medical materials	3.00	5.00	3.00	4.00	2.00	17.00	0.21%
Disposable nappies	70.00	45.00	45.00	33.00	1.50	194.50	2.40%
Glass fines	1.00	0.01			12.00	13.01	0.16%
Other	5.00	71.00	17.00	88.00	139.10	320.10	3.95%
Residue	26.00	40.00		25.00	25.00	116.00	1.43%
<b>Total Landfill</b>	<b>481.00</b>	<b>669.51</b>	<b>395.00</b>	<b>523.00</b>	<b>466.60</b>	<b>2535.11</b>	<b>31.27%</b>
Kitty litter/ dog	35.00	100.00	0.50	15.30	15.00	165.80	2.05%
Treated wood		3.00		6.00	70.00	79.00	0.97%
Paint tins/ residue				1.00	2.00	3.00	0.97%
<b>Total Other</b>	<b>35.00</b>	<b>103.00</b>	<b>0.50</b>	<b>22.30</b>	<b>87.00</b>	<b>247.80</b>	<b>3.06%</b>
<b>Total</b>	<b>1676.80</b>	<b>2366.51</b>	<b>1139.60</b>	<b>1465.00</b>	<b>1459.1</b>	<b>8107.0</b>	<b>100.00%</b>



## Recycling Bins – Weight (Kg)

Material Recycling Kgs	Monday	Tuesday	Wed.	Thursday	Friday	Totals	% Total
Paper - White office	4.97	34.50		2.88	2.54	44.89	3.79%
Paper - mixed	8.29	5.50	5.90	2.26	4.28	26.23	2.22%
Cardboard	38.00	30.00	33.50	18.00	28.00	147.50	12.46%
Newspaper	19.42	56.00	38.00	38.00	43.88	195.30	16.50%
Magazine/ catalogue	46.00	103.00	69.50	52.00	23.80	294.30	24.87%
LPB(CDL)	0.14	0.04	0.06	0.18	0.02	0.44	0.04%
LPB	0.84	1.96	1.42	1.06	1.20	6.48	0.55%
<b>Total paper</b>	<b>117.66</b>	<b>231.00</b>	<b>148.38</b>	<b>114.38</b>	<b>103.72</b>	<b>715.14</b>	<b>60.43%</b>
Glass white (CDL)	3.72	0.44	0.22	0.20	4.04	8.62	0.73%
Glass green (CDL)	1.36	0.44		0.86	4.80	7.46	0.63%
Glass brown (CDL)	0.46		1.66	1.20	7.06	10.38	0.88%
Glass white	21.82	13.98	14.30	27.50	35.80	113.40	9.58%
Glass green	18.72	20.06	17.48	11.70	32.26	100.22	8.47%
Glass brown	2.74	0.88	1.06	0.46	1.18	6.32	0.53%
<b>Total Glass</b>	<b>48.82</b>	<b>35.80</b>	<b>34.72</b>	<b>41.92</b>	<b>85.14</b>	<b>246.40</b>	<b>20.82%</b>
PET (CDL) (1)	1.08	1.08	0.84	0.54	3.58	7.12	0.60%
PET (1)	2.50	2.20	1.32	1.20	2.46	9.68	0.82%
HDPE (CDL) (2)	0.12	0.10		0.10	0.01	0.33	0.03%
HDPE (2) Milk/opaque	4.06	5.86	4.14	2.60	3.74	20.40	1.72%
HDPE (2) coloured	1.86	2.26	0.84		2.16	7.12	0.60%
PVC (CDL) (3)							0.00%
PVC (3)		0.16	0.34	0.20	0.12	0.82	0.07%
Polystyrene (6) + 7	0.06	0.52	0.18	0.26	0.18	1.20	0.10%
Polypropylene (5)		2.10	2.30	3.12	1.92	9.44	0.80%
LDPE (4)	2.24	0.06	0.34	0.08	0.14	2.86	0.24%
Mixed plastics	0.44	1.10	0.82	0.44	0.52	3.32	0.28%
<b>Total Plastics</b>	<b>12.36</b>	<b>15.44</b>	<b>11.12</b>	<b>8.54</b>	<b>14.83</b>	<b>62.29</b>	<b>5.26%</b>
Aerosol cans	0.28	0.30	0.06	0.20	0.66	1.50	0.13%
Aluminium foil	0.14	0.08	0.08	0.18	0.06	0.54	0.05%
Aluminium (CDL)	0.12	0.14	0.18	0.12	1.36	1.92	0.16%
Steel cans food	5.16	5.00	4.58	3.88	5.38	24.00	2.03%
Steel paint (empty)						0.00	0.00%
<b>Total Metal</b>	<b>5.70</b>	<b>5.52</b>	<b>4.90</b>	<b>4.38</b>	<b>7.46</b>	<b>27.96</b>	<b>2.36%</b>
<b>Total Recyclables</b>	<b>184.54</b>	<b>287.76</b>	<b>199.12</b>	<b>169.22</b>	<b>211.15</b>	<b>1051.79</b>	<b>88.88%</b>
Lawn Clippings							0.00%
Leaves/flowers						0.00	0.00%
Prunings						0.00	0.00%
Weeds							0.00%
Logs/ clean wood							0.00%
Soil/ ash/ dirt						0.00	0.00%
Food	0.72	4.20		0.76	1.14	6.82	0.58%
Biobags						0.00	0.00%

Compostable paper	1.68	1.76	0.72	2.44	2.20	8.80	0.74%
<b>Total Organics</b>	<b>2.40</b>	<b>5.96</b>	<b>0.72</b>	<b>3.20</b>	<b>3.34</b>	<b>15.62</b>	<b>1.32%</b>
E- materials				1.56	1.98	3.54	0.30%
Clean film	0.90	1.98		0.22	0.38	3.48	0.29%
Textiles - re-usables	1.88					1.88	0.16%
Misc. metal			1.30	1.74	0.40	3.44	0.29%
<b>Total Special</b>	<b>2.78</b>	<b>1.98</b>	<b>1.30</b>	<b>3.52</b>	<b>2.76</b>	<b>12.34</b>	<b>1.04%</b>
Textiles - scrap	0.08	5.24		3.72	1.06	10.10	0.85%
Pyrex/ceramics	0.20		0.78		0.66	1.64	0.14%
Food packaging	0.78	2.20	1.46	1.50	1.60	7.54	0.64%
Expanded polystyrene	0.22	0.80	0.12	0.04	0.10	1.28	0.11%
Healthcare/ hygiene		0.08		0.10		0.18	0.02%
Medical materials		0.02	0.04	0.02	0.06	0.14	0.01%
Disposable nappies						0.00	0.00%
Glass fines	6.48	2.82	1.98	6.20	11.24	28.72	2.43%
Other	2.72	0.11	1.66	3.40	3.98	11.87	1.00%
Residue	1.84	3.26	3.32	4.32	4.36	17.10	1.45%
<b>Total Landfill</b>	<b>12.32</b>	<b>14.53</b>	<b>9.36</b>	<b>19.30</b>	<b>23.06</b>	<b>78.57</b>	<b>6.64%</b>
Bagged materials	3.94	17.80	0.52		1.92	24.18	2.04%
Treated wood						0.00	0.00%
Paint tins with residue				0.86		0.86	0.00%
<b>Total other</b>	<b>3.94</b>	<b>17.80</b>	<b>0.52</b>	<b>0.86</b>	<b>1.92</b>	<b>25.04</b>	<b>2.12%</b>
<b>Total</b>	<b>205.98</b>	<b>328.03</b>	<b>211.02</b>	<b>196.10</b>	<b>242.23</b>	<b>1183.36</b>	<b>100.00%</b>

### Recycling Bins – Volume (L)

Material Recycling L	Monday	Tuesday	Wednesday	Thursday	Friday	Totals	% Total
Paper - White office	50.00	160.00		55.00	15.00	280.00	2.15%
Paper - mixed	85.00	70.00	85.00	30.00	70.00	340.00	2.61%
Cardboard	1200.00	920.00	650.00	600.00	630.00	4000.00	30.75%
Newspaper	185.00	510.00	260.00	240.00	210.00	1405.00	10.80%
Magazine/ catalogue	190.00	280.00	210.00	180.00	80.00	940.00	7.23%
LPB(CDL)	1.00	0.80	1.00	8.00	0.50	11.30	0.09%
LPB	40.00	70.00	75.00	55.00	35.00	275.00	2.11%
<b>Total paper</b>	<b>1751.00</b>	<b>2010.80</b>	<b>1281.00</b>	<b>1168.00</b>	<b>1040.50</b>	<b>7251.30</b>	<b>55.75%</b>
Glass white (CDL)	5.00	1.00	0.30	0.30	15.00		0.00%
Glass green (CDL)	5.00	0.70		2.00	20.00	27.70	0.21%
Glass brown (CDL)	0.90		2.00	2.00	23.00		0.00%
Glass white	50.00	60.00	58.00	125.00	140.00	433.00	3.33%
Glass green	30.00	71.00	75.00	48.00	130.00	354.00	2.72%
Glass brown	10.00	3.00	3.00	1.50	3.00	20.50	0.16%
<b>Total Glass</b>	<b>100.90</b>	<b>135.70</b>	<b>138.30</b>	<b>178.80</b>	<b>331.00</b>	<b>884.70</b>	<b>6.80%</b>
PET (CDL) (1)	50.00	65.00	50.00	30.00	140.00	335.00	2.58%
PET (1)	100.00	70.00	45.00	35.00	80.00	330.00	2.54%
HDPE (CDL) (2)	2.00	1.50		1.00	0.10	4.60	0.04%

HDPE (2) Milk	230.00	325.00	240.00	130.00	195.00	1120.00	8.61%
HDPE (2) coloured	45.00	55.00	8.00		35.00	143.00	1.10%
PVC (3)		15.00	15.00	15.00	5.00	50.00	0.38%
Polystyrene (6) + 7	1.50	35.00	5.00	10.00	5.00	56.50	0.43%
Polypropylene (5)		80.00	100.00	86.00	70.00	336.00	2.58%
LDPE (4)	80.20	0.50	2.00	0.60	2.00	85.30	0.66%
Mixed plastics	5.00	35.00	60.00	10.00	8.00	118.00	0.91%
<b>Total Plastics</b>	<b>513.70</b>	<b>682.00</b>	<b>525.00</b>	<b>317.60</b>	<b>540.10</b>	<b>2578.40</b>	<b>19.82%</b>
Aerosol cans	4.00	3.00	1.00	2.00	10.00	20.00	0.15%
Aluminium foil	5.00	2.00	2.00	5.00	1.50	15.50	0.12%
Aluminium (CDL)	3.00	4.00	9.00	3.00	60.00	79.00	0.61%
Steel cans food	60.00	83.00	60.00	55.00	70.00	328.00	2.52%
Steel paint (empty)						0.00	0.00%
<b>Total Metal</b>	<b>72.00</b>	<b>92.00</b>	<b>72.00</b>	<b>65.00</b>	<b>141.50</b>	<b>442.50</b>	<b>3.40%</b>
<b>Total Recyclables</b>	<b>2437.60</b>	<b>2920.50</b>	<b>2016.30</b>	<b>1729.40</b>	<b>2053.10</b>	<b>11156.90</b>	<b>85.77%</b>
Leaves/flowers						0.00	0.00%
Prunings						0.00	0.00%
Logs/ clean wood							0.00%
Soil/ ash/ dirt						0.00	0.00%
Food	2.00	45.00		3.00	7.00	57.00	0.44%
Biobags						0.00	0.00%
Compostable paper	90.00	55.00	33.00	80.00	60.00	318.00	2.44%
<b>Total Organics</b>	<b>92.00</b>	<b>100.00</b>	<b>33.00</b>	<b>83.00</b>	<b>67.00</b>	<b>375.00</b>	<b>2.88%</b>
E- materials	10.00			5.00	20.00	35.00	0.27%
Clean film	50.00	90.00		20.00	25.00	185.00	1.42%
Textiles - re-usables						0.00	0.00%
Misc. metal			5.00	5.00	3.00	13.00	0.10%
<b>Total Special Collections</b>	<b>60.00</b>	<b>90.00</b>	<b>5.00</b>	<b>30.00</b>	<b>48.00</b>	<b>233.00</b>	<b>1.79%</b>
Textiles - scrap	1.00	65.00		90.00	10.00	166.00	1.28%
Pyrex/ceramics	1.00		1.00		2.00	4.00	0.03%
Food packaging	40.00	80.00	70.00	60.00	60.00	310.00	2.38%
Expanded PS	40.00	75.00	10.00	2.00	5.00	132.00	1.01%
Healthcare/ hygiene		0.20		0.20		0.40	0.00%
Medical materials		0.50	1.00	0.10	0.20	1.80	0.01%
Disposable nappies						0.00	0.00%
Glass fines	25.00	15.00	8.00	25.00	30.00	103.00	0.79%
Other	40.00	0.70	20.00	40.00	35.00	135.70	1.04%
Residue	10.00	30.00	15.00	15.00	10.00	80.00	0.62%
<b>Total Landfill</b>	<b>157.00</b>	<b>266.40</b>	<b>125.00</b>	<b>232.30</b>	<b>152.20</b>	<b>932.90</b>	<b>7.17%</b>
Bagged Materials	100.00	165.00	10.00		30.00	305.00	2.34%
Treated wood						0.00	0.00%
Paint tins/ residue				5.00		5.00	0.00%
<b>Total Other</b>	<b>100.00</b>	<b>165.00</b>	<b>10.00</b>	<b>5.00</b>	<b>30.00</b>	<b>310.00</b>	<b>2.38%</b>
<b>Total</b>	<b>2846.60</b>	<b>3541.90</b>	<b>2189.30</b>	<b>2079.70</b>	<b>2350.30</b>	<b>13007.80</b>	<b>100.00%</b>

### Organics Bins – Weight (Kg)

Material Organics kg	Monday	Tuesday	Wednesday	Thursday	Friday	Totals	% Total
Lawn Clippings	91.00	88.50	79.00	76.50	16.00	351.00	17.99%
Leaves/flowers	19.00	164.50		74.00	183.50	441.00	22.60%
Prunings	56.50	128.50	84.50	109.00	145.50	524.00	26.86%
Weeds	4.00	17.50		52.50	76.00	150.00	7.69%
Logs/ clean wood	22.00	44.50	1.62	66.50	53.00	187.62	9.62%
Soil/ ash/ dirt		1.56		35.00	4.24	40.80	2.09%
Food	5.74	10.52	9.30		3.50	29.06	1.49%
Biobags	19.24	40.87	50.38	25.00	21.50	156.99	8.05%
Compostable paper	0.00		0.64			0.64	0.03%
<b>Total Organics</b>	<b>217.48</b>	<b>496.45</b>	<b>225.44</b>	<b>438.50</b>	<b>503.24</b>	<b>1881.11</b>	<b>96.42%</b>
E- materials						0.00	0.00%
Clean film						0.00	0.00%
Textiles -re-usables						0.00	0.00%
Misc. metal						0.00	0.00%
<b>Total Special Collections</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00%</b>
Textiles scrap						0.00	0.00%
Pyrex/ceramics						0.00	0.00%
Food packaging						0.00	0.00%
Expanded PS						0.00	0.00%
Healthcare/ hygiene						0.00	0.00%
Medical materials						0.00	0.00%
Disposable nappies						0.00	0.00%
Glass fines						0.00	0.00%
Other/Contam.	7.92	39.34	6.94	1.60	11.78	67.58	3.46%
Residue						0.00	0.00%
<b>Total Landfill</b>	<b>7.92</b>	<b>39.34</b>	<b>6.94</b>	<b>1.60</b>	<b>11.78</b>	<b>67.58</b>	<b>3.46%</b>
Kitty litter/ dog						0.00	0.00%
Treated wood	0.24			2.00		2.24	0.11%
Paint tins/residue						0.00	0.11%
<b>Total other</b>	<b>0.24</b>	<b>0.00</b>	<b>0.00</b>	<b>2.00</b>	<b>0.00</b>	<b>2.24</b>	<b>0.11%</b>
<b>Total</b>	<b>225.64</b>	<b>535.79</b>	<b>232.38</b>	<b>442.10</b>	<b>515.02</b>	<b>1950.93</b>	<b>100.00%</b>

### Organics Bins – Volume (L)

Material Organics L	Monday	Tuesday	Wed.	Thursday	Friday	Totals	% Total
Lawn Clippings	420.00	450.00	390.00	300.00	45.00	1605.00	11.69%
Leaves/flowers	160.00	1110.00		400.00	1140.00	2810.00	20.47%
Prunings	700.00	1300.00	780.00	1270.00	1640.00	5690.00	41.46%
Weeds	90.00	210.00		340.00	480.00	1120.00	8.16%
Logs/ clean wood	80.00	270.00	10.00	305.00	260.00	925.00	6.74%
Soil/ ash/ dirt		20.00		160.00	21.00	201.00	1.46%
Food	15.00	38.00	40.00		15.00	108.00	0.79%
Biobags	70.00	100.00	185.00	100.00	70.00	525.00	3.83%

Compostable paper			20.00			20.00	0.15%
<b>Total Organics</b>	1535.00	3498.00	1425.00	2875.00	3671.00	13004.00	94.75%
E- materials						0.00	0.00%
Clean film						0.00	0.00%
Textiles re-usables						0.00	0.00%
Misc. metal						0.00	0.00%
<b>Total Special</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
Textiles/ - scrap						0.00	0.00%
Pyrex/ceramics						0.00	0.00%
Food packaging						0.00	0.00%
Expanded polystyrene						0.00	0.00%
Healthcare/ hygiene						0.00	0.00%
Medical materials						0.00	0.00%
Disposable nappies						0.00	0.00%
Glass fines						0.00	0.00%
Other	25.00	520.00	25.50	25.00	120.20	715.70	5.21%
Residue						0.00	0.00%
<b>Total Landfill</b>	25.00	520.00	25.50	25.00	120.20	715.70	5.21%
Kitty litter/ dog						0.00	0.00%
Treated wood	1.00			4.00		5.00	0.04%
Paint tins/ residue						0.00	0.04%
<b>Total other</b>	1.00	0.00	0.00	4.00	0.00	5.00	0.04%
<b>Total</b>	1561.00	4018.00	1450.50	2904.00	3791.20	13724.70	100.00%

## Appendix D: Diversion Rate Data

Material	Waste kgs/hh/wk	Recycling kg/hh/wk	Organics kg/hh/wk	Total kg/hh/wk	% Diversion
Paper - White office	0.39	0.22	0.00	0.62	36.47%
Paper - mixed	0.14	0.13	0.00	0.27	47.98%
Cardboard	0.25	0.74	0.00	0.99	74.59%
Newspaper	0.08	0.98	0.00	1.06	92.08%
Magazine/ catalogue	0.11	1.47	0.00	1.58	92.92%
LPB(CDL)	0.01	0.00	0.00	0.01	16.18%
LPB	0.02	0.03	0.00	0.05	66.12%
<b>Total Paper</b>	<b>1.01</b>	<b>3.58</b>	<b>0.00</b>	<b>4.58</b>	<b>78.00%</b>
Glass white (CDL)	0.01	0.04	0.00	0.05	83.04%
Glass green (CDL)	0.01	0.04	0.00	0.05	79.87%
Glass brown (CDL)	0.00	0.05	0.00	0.05	95.93%
Glass white	0.20	0.57	0.00	0.77	73.67%
Glass green	0.11	0.50	0.00	0.61	82.57%
Glass brown	0.00	0.03	0.00	0.03	91.86%
<b>Total Glass</b>	<b>0.33</b>	<b>1.23</b>	<b>0.00</b>	<b>1.56</b>	<b>78.79%</b>
PET (CDL) (1)	0.01	0.04	0.00	0.05	72.06%
PET (1)	0.04	0.05	0.00	0.09	56.41%
HDPE (CDL) (2)	0.00	0.00	0.00	0.00	54.10%
HDPE (2) Milk	0.02	0.10	0.00	0.12	83.20%
HDPE (2) other opaque	0.00	0.00	0.00	0.00	N/A
HDPE (2) coloured	0.04	0.04	0.00	0.08	46.48%
PVC (CDL) (3)	0.00	0.00	0.00	0.00	N/A
PVC (3)	0.00	0.00	0.00	0.01	74.55%
Polystyrene (6) + 7	0.02	0.01	0.00	0.02	26.91%
Polypropylene (5)	0.06	0.05	0.00	0.11	43.11%
LDPE (4)	0.00	0.01	0.00	0.02	78.14%
Mixed plastics	0.02	0.02	0.00	0.04	47.16%
<b>Total Plastics</b>	<b>0.22</b>	<b>0.31</b>	<b>0.00</b>	<b>0.53</b>	<b>58.96%</b>
Aerosol cans	0.02	0.01	0.00	0.02	33.33%
Aluminium foil	0.02	0.00	0.00	0.02	12.80%
Aluminium (CDL)	0.01	0.01	0.00	0.02	57.83%
Steel cans food	0.06	0.12	0.00	0.18	65.93%
Steel cans paint (empty)	0.01	0.00	0.00	0.01	0.00%
<b>Total Metal</b>	<b>0.12</b>	<b>0.14</b>	<b>0.00</b>	<b>0.26</b>	<b>54.57%</b>
<b>Total Recyclables</b>	<b>1.67</b>	<b>5.26</b>	<b>0.00</b>	<b>6.93</b>	<b>75.86%</b>
Lawn Clippings	0.00	0.00	1.76	1.76	100.00%
Leaves/flowers	0.01	0.00	2.21	2.21	99.58%
Branches/prunings	0.05	0.00	2.62	2.67	98.31%
Weeds	0.04	0.00	0.75	0.79	95.37%
Logs/ clean wood	0.00	0.00	0.94	0.94	100.00%
Soil/ ash/dirt	0.04	0.00	0.20	0.24	84.65%

Food	3.62	0.03	0.15	3.80	3.82%
Biobags	0.04	0.00	0.78	0.82	95.15%
Compostable paper	0.32	0.04	0.00	0.36	0.88%
<b>Total Organics</b>	<b>4.11</b>	<b>0.08</b>	<b>9.41</b>	<b>13.59</b>	<b>69.21%</b>
E- materials	0.10	0.02	0.00	0.12	N/A
Clean film	0.15	0.02	0.00	0.16	N/A
Textiles/ re-usables	0.16	0.01	0.00	0.17	N/A
Misc. metal	0.08	0.02	0.00	0.10	N/A
<b>Total Special Collections</b>	<b>0.49</b>	<b>0.06</b>	<b>0.00</b>	<b>0.55</b>	<b>N/A</b>
Textiles/ - scrap	0.24	0.05	0.00	0.29	N/A
Pyrex/ceramics/glass	0.14	0.01	0.00	0.15	N/A
Food/ other packaging	0.34	0.04	0.00	0.38	N/A
Expanded polystyrene	0.06	0.01	0.00	0.06	N/A
Healthcare/ hygiene	0.07	0.00	0.00	0.07	N/A
Medical materials	0.01	0.00	0.00	0.01	N/A
Disposable nappies	0.29	0.00	0.00	0.29	N/A
Glass fines	0.05	0.14	0.00	0.20	N/A
Other	0.24	0.06	0.34	0.64	N/A
Residue	0.26	0.09	0.00	0.35	N/A
<b>Total Landfill</b>	<b>1.70</b>	<b>0.39</b>	<b>0.34</b>	<b>2.43</b>	<b>N/A</b>
Kitty litter/ dog	0.40	0.12	0.00	0.52	N/A
Treated wood	0.25	0.00	0.01	0.26	N/A
Paint tins/residue	0.01	0.00	0.00	0.02	N/A
<b>Total Other</b>	<b>0.67</b>	<b>0.13</b>	<b>0.01</b>	<b>0.80</b>	<b>N/A</b>
<b>Total</b>	<b>8.63</b>	<b>5.92</b>	<b>9.75</b>	<b>24.31</b>	



## Appendix E: Organics Bin Contamination

<b>Monday</b>	<b>kg</b>	<b>count</b>
Rock		1
Packaging		8
String		1
Plastic netting		2
Packaged corn		1
Treated wood		3
<b>Total</b>	<b>7.92</b>	<b>16</b>
<b>Tuesday</b>	<b>Kg</b>	<b>count</b>
Bagged garden materials		4
Bagged food		7
Rubber bands		2
EPS		1
Plastic cups		2
Plant pot		1
Hose		1
Packaging plastic		10
Plant tag		2
Rope handle bag		1
Glass jar		1
CF globe broken		1
String		3
Bagged soup		2
<b>Total</b>	<b>39.34</b>	<b>38</b>
<b>Wednesday</b>	<b>Kg</b>	<b>count</b>
Flower foam		4
Foam tray		1
Magazine		1
Plastic bags		3
Peg		1
Film plastic		4
<b>Total</b>	<b>6.94</b>	<b>14</b>
<b>Thursday</b>	<b>Kg</b>	<b>count</b>
Treated wood		3
Textile		1
Packaging		9
LPB		1
plastic bags		3
broken glass		1
<b>Total</b>	<b>1.6</b>	<b>18</b>
<b>Friday</b>	<b>kg</b>	<b>count</b>
Rocks		3

Bagged materials		5
Recyclables		11
Treated wood		6
Metal		3
Textile		13
Packaging		73
<b>Total</b>	<b>11.78</b>	<b>114</b>
<b>Weekly total</b>	<b>67.58</b>	<b>200</b>