

## Warwickshire Waste Partnership

18th June 2014

### Waste Composition Analysis

#### Recommendations

- (1) The Waste Partnership is asked to note the overview of the recent waste composition analysis.

#### 1.0 Background

- 1.1 Warwickshire County Council commissioned a further waste composition analysis to take place during a three week period in February/March 2014 (spring 2014) on behalf of the Partnership.
- 1.2 The analysis replicated the waste composition surveys undertaken in October / November 2012 and February / March 2013 in order to provide comparable results.
- 1.3 The latest survey, as per the previous analyses, focused on the weight and composition of
- kerbside residual waste
  - kerbside organic/green recycling containers,
  - and HWRC residual waste (at Warwickshire's four largest sites -Lower House Farm HWRC in North Warwickshire, Hunters Lane HWRC in Rugby, Princes Drive HWRC in Leamington and Burton Farm HWRC in Stratford).
- 1.3 The data was again split into primary categories and sub categories these are shown in Appendix 1.
- 1.4 The key aim of the waste composition analysis was to a provide information which could be used by the Partnership when planning future services and campaigns etc.

#### 2.0 Residual Kerbside Analysis

- 2.1 The same households were surveyed in the spring 2014 survey as had been during the two surveys undertaken in 2012/13. The households were selected using Mosaic demographic profiles so that results from each survey could therefore be weighted to give the annual picture of the residual waste being collected within individual WCAs as well as combined figures for the County.

2.2 The two largest proportions of the bin, as per the previous analyses, were:

- Putrescibles (organic matter capable of being decomposed) at 43.63% (this was previously 40.24%) and
- Miscellaneous combustibles at 10.46% (previously 12%).

The major component of the putrescibles was seen to be food waste forming 39.6 (previously 38.8%), this included home compostable food waste (14.24% previously 18.21%) and non-home compostable food waste (25.33% previously 17.14%).

The main element of the miscellaneous combustible category was again disposable nappies at 5.4% (previously 7.3%).

The key findings, along with a comparison of the previous year's analysis are shown in Appendix 2.

2.3 Across Warwickshire it is estimated that 57.9% (previously 47.1%) of all residual waste being disposed of at the kerbside is potentially recyclable (utilising existing kerbside collection systems).

One of the main reasons for the rise in this figure is the introduction of the alternate weekly collection service in North Warwickshire that now means that food waste is able to be recycled and therefore the food waste content of the residual bin is now considered 'potentially recyclable'.

Out of the material that could potentially be recycled:

- 68% was food waste (previously 62.1%),
- 7.6% was paper (previously 10.9%),
- 5.8% was plastic (previously 7%) and
- 5.1% was card & cardboard (previously 6%)
- the remaining 13.5% is made up of recyclable textiles, plastics, glass, metals, WEEE and garden waste.

2.4 In terms of kerbside residual waste generation only, households were setting out an average of 7.51kg/hh/wk for direct collection. This figure has decreased slightly compared with the previous year results which showed an average of 7.68kg/hh/wk. For this sample of households, this equates to nearly 9kg/hh/yr reduction. On a county level a reduction of 27kg/hh/yr is currently being forecast for 2013/14 compared with 2012/13.

### **3.0 Organic Kerbside Analysis**

3.1 For the organic kerbside bin analysis, again the same households were surveyed as per the previous year's surveys. Results from each survey could again be weighted to give the annual picture of the waste being collected within individual WCAs as well as combined figures for the County and compared with the previous year's results.

3.2 The organic kerbside bin was made up of:

- 88.37% garden waste (previously 91.09%),
- 7.68% putrescible (food waste) materials (previously 7.45%) and
- 3.79% other materials.

The breakdown of the other materials is provided below:

Material	%
Paper and Card	0.41%
Waste Wood	2.19%
Pet Bedding	0.47%
All Other Waste	0.72%

3.3 The data obtained during the composition showed that 12% of **all** food waste (previously 15%) and 99% of **all** garden waste (previously 99%) was correctly captured by household where these collections were available. This decrease in capture rate of food waste can be explained by the introduction of the alternate weekly collection within North Warwickshire (see 2.3).

## 4.0 HWRC Analysis

4.1 During this survey residual waste was sampled at weekends from Princes Drive and Lower House Farm HWRCs and during the week from Hunters Lane and Burton Farm HWRCs. The total weight of waste analysed during the survey in 2014 at HWRCs was half that undertaken during the two analyses undertaken in 2012/13 due to budget constraints.

4.2 As per the previous waste composition analysis, black sacks that were deemed to be for the disposal of general household waste were removed from the overall pile. The total amount of this bagged material was weighed and the contents sorted separately. The waste was then combined to give an overall composition of residual waste being disposed of at the HWRCs.

4.3 Results from the survey showed that a large proportion of residual waste being disposed of at the HWRCs is bagged household waste. This material ranged from 7% (Hunters Lane) to 29% (Lower House Farm) of the total residual waste and overall it was seen that bagged household waste formed a higher proportion of weekend (24%) as opposed to weekday (12%) waste.

4.4 Compositionally black sacks were seen to be different to that of the rest of the residual waste, around 41% of black bag contents consisted of food and garden waste (previously 23.5%), with 15% being paper and card (previously 20%) and 7% being textiles (previously 11%).

4.5 The main materials making up HWRC residual waste (including the black bag waste) are:

- miscellaneous combustibles such as furniture, mattresses, carpet and wood waste (27%),

- paper & card (8%),
- miscellaneous non-combustibles such as DIY, rubble and plasterboard (6%),
- dense plastics (22%),
- textiles (10%) and
- food & garden waste (10%).

The key findings, along with a comparison of the previous waste analysis, are shown in Appendix 3.

- 4.6 On average 49% of weekday and 48% of weekend residual waste is potentially recyclable (utilising current HWRC recycling services). 30% could have been recycled utilising kerbside recycling services and nearly 19% could have been recycled using alternative skips at the site.

## 5.0 Next steps

- 5.1 It is proposed that future communication campaigns target the recyclable material that is currently being disposed of in the residual waste both at the kerbside and the HWRCs.

## Background Papers

1. Waste Composition Analysis, 25<sup>th</sup> June 2013, Warwickshire Waste Partnership

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