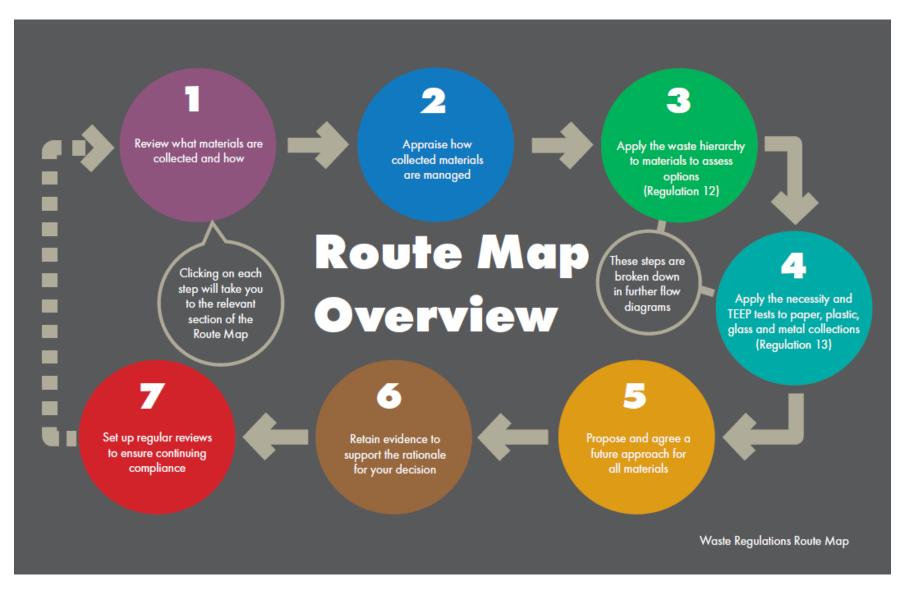
### **APPENDIX B**



## Step 1 – Determine What Waste is Collected and How

TABLE A - Collection Method for each waste streams and associated Tonnages 2013-14 No. Tonnes Collection **Predominant Container** Households **Collection Method** collected 13-**Targeted Materials** Types/Sizes offered Frequency scheme Kerbside Co-mingled Paper & card, metal cans and Fortnightly 180l/ 240l wheeled bin 48,350 7,362.56 recycling aerosols, plastic bottles. Glass n/a n/a 48,350 Kerbside Separate Green garden waste Fortnightly reusable sack 48,350 3,796 collections Food n/a n/a 0 n/a 48,350 0 **Batteries** n/a 180l/ 240l wheeled bin Kerbside Refuse Mixed non-recyclable waste Fortnightly 48,350 23,040 Textiles, paper, glass, small **Bring sites** Variable Mixed containers 48,350 2,679 WEEE Bulky waste Mixed household materials, By appointment n/a 48,350 130.14 including WEEE, furniture etc collections Offensive/incontinence waste 38.37 Clinical waste as required Bags, sharps boxes 48,350 etc Mixed material from street Street cleaning cleansing operations (litter, n/a n/a 48,350 2,087 material flytipping, street sweepings) Segregated containers for a Household Waste range of materials. Including **Recycling Centres** n/a n/a 48,350 16,816 garden waste, WEEE, rubble, (provided by WDA) soil, wood, and residual waste Total 55,948.29

# Step 2 – Check How Collected Materials are Treated and Recycled

	lication of the Waste I		Don't I		Part II			
			Part I				Part II	l
	<b>M</b> aterial	Collection Channel	Tonnes collected 13-14	Separately collected from other recyclate?	Sent straight to reprocessor?	Separated from other recyclables in a MRF?	Where on the waste hierarchy does this lie?	Are closed loop processes used for some, all or none of the material?
	Food	Kerbside separate collections	0.00	n/a	n/a	n/a	n/a	n/a
	Garden waste	Kerbside separate collections Parks and	3,796.49		Y	N	Recycling	n/a
		Gardens Total	245.94 4,042.43	Y	Υ	Y	Recycling	n/a
	Glass	Bring Site  Kerbside separate			Y	N	Recycling	All
		Collections Total	0.00 2,025.03	n/a	n/a	N	Recycling	All
		Bring Site Bulky waste	0.00	n/a	n/a	n/a	n/a	n/a
	WEEE	collections	18.94	Υ	Υ	N	Reuse/Recycling	n/a
	Batteries	Total  Kerbside separate						
		collections Bring Site	0.00 0.36	-	n/a v	n/a N	n/a Recycling	n/a Some
Material Collected for Recycling or Reuse	Metal Packaging	Kerbside Co- mingled recycling	350.82	N	N	Υ	Recycling	Some
	Books	Total Bring Site	351.18 71.01	Υ	Υ	N	Reuse	n/a
	Bric-a-brac	Bulky waste collections	0.00	n/a	n/a	N	Reuse	n/a
	Carpets	Bulky waste collections	0.00	n/a	n/a	N	Reuse	n/a
	Textiles	Bring Site	253.33	Y	Υ	N	Reuse	n/a
	Furniture	Bulky waste collections	0.00	n/a	n/a	N	Reuse	n/a
		Bring Site Kerbside Co-	82.10	Υ	Y	N	Recycling	Some
	Paper and Card	mingled recycling Total	5,460.79 5,542.89	N	N	Υ	Recycling	Some
	Plastics	Bring Site Kerbside Co-	0.95 525.89		Υ	N	Recycling	Some
		mingled recycling Total	526.84	IN	N	Y	Recycling	Some
	Scrap metal VIDEO TAPES, DVDS AND	Mixed sources	0.00		n/a	n/a	n/a	n/a
	CDS Wood	Bring Site Mixed sources	0.00	n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
	Cartons	Bring Site	0.00		n/a	n/a	n/a	n/a
	Clinical	Clinical waste	38.37	n/a	Υ	N	Incineration with energy recovery	n/a
	Bulky	Bulky waste collections	111.20	n/a	Υ	N	Landfill	n/a
Material collected for	Mixed Residual Waste	Kerbside Refuse	23,039.92	n/a	Υ	N	Incineration with energy recovery	n/a
disposal or recovery	Street cleaning material	Street cleaning material	2,086.51	n/a	Υ	N	Incineration with energy recovery (16%), Landfill (84%)	n/a
	MRF Residue	Kerbside Co- mingled recycling	1,025.06	n/a	N	ν	Incineration with energy recovery (82%), Landfill (18%)	n/a
Material collec	Location reuse/recycling via HWF		10,554.67	n/a Y	N	N	Reuse/Recycling	Some
Material collected for disposal or recovery via HWRCs by WDA		6,260.91		V	N	Incineration with energy recovery (58%), Landfill (42%)		
	Total		55,948.29	n/a		IN	Lanum (42%)	n/a

TABLE C - Inco					
	FBC				
Material	Income from material sale	Income from Recycling credit	Total income		
Glass	58,227	71,534	129,761		
Co-mingled recycling	288,537	0	288,537		
Other materials (paper. Textiles)	78,507	8,158	86,665		
Total	425,271	79,692	504,963		
TABLE D - Brea	TABLE D - Breakdown of MRF inputs				

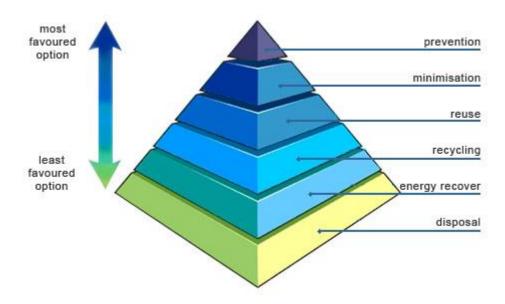
	Material	Tonnage	% of MRF inputs
Material Collected as [	OMR	7,362.56	100
	Paper & Card	5,568.94	75.64
Total Targeted	Metal	360.56	4.90
materials collected	Plastic bottles	562.28	7.64
	Total	6,491.77	88.17
	Paper & Card	5,460.79	74.17
Targeted Material –	Metal	350.82	4.76
sent to market	Plastic bottles	525.89	7.14
	Total	6,337.50	86.08
Total MRF Residue		1,025.06	13.92
	Paper & Card	108.14	1.47
Targeted Material –	Metal	9.74	0.13
process loss	Plastic bottles	36.39	0.49
	Total	154.27	2.10
	Other Plastic	374.93	5.09
	Beverage Cartons	44.12	0.60
Non-Targeted	Glass	40.03	0.54
material	Food waste	41.07	0.56
material	Undesirable DMR	43.95	0.60
	Other	326.68	4.44
	Total	870.79	11.83
Destination of MRF	Landfill	180.64	2.45
Residue	Energy Recovery	844.42	11.47
Rejected by reproces	sor	4.44	0.06

TABLE E - Current Glass Capture Rate 2013-14				
		Total glass in		
Total glass not being	Total glass collected for	overall waste		
recycled - tonnage	recycling - tonnage	stream - tonnage	Glass capture - %	
1067.21	2025.03	2860.21		70.80

# **TABLE F – Reprocessor Destination Information**

Commodity	Notes on reprocessing		
Plastic Bottles	In 2013-14, 99.6% of PI plastic bottles were reprocessed by Closed Loop		
	Recycling Limited. They reprocess post-consumer plastic bottles into food		
	grade resin, as well as non-food grades.		
News and	In 2013-14, 99% of news and pamphlets was sent to Aylesford Newsprint or		
Pamphlets	UPM Kymmene. Aylesford state that they receive "500,000 tonnes of		
	recovered fibre annually in order to manufacture on average 400,000 tonnes		
	of 100% recycled newsprint."		
	UPM state that they receive "640,000 tonnes of recovered paper per year. It		
	is the largest newsprint mill in the UK, producing newsprint for the national		
	and the regional press, with capacity to produce 500,000 tonnes a year."		
Aluminium	100% of PI aluminium is recycled by Novelis UK Ltd. Ingots produced have a		
	wide range of uses, including recycling back into beverage cans.		
Steel	86% of PI steel is reprocessed by AMG Resources Ltd, into new steel products		
Cardboard	Around 75% of PI material may be exported. This is subject to strict controls,		
	and will be recycled back into a cardboard product.		
Mixed paper	100% recycled by UK-based Aylesford or UPM (as detailed above) or DS		
	Smith. Material is recycled into paper products		

Step 3 - Apply the Waste Hierarchy



The Waste Hierarchy can be applied to Fareham's waste arisings. The table below shows the proportion of Fareham's waste according to the treatment of it, for the year 2013-14.

Treatment Option	Percentage of total waste
Re-use (books, shoes and some textiles)	0.6 %
Recycling (includes other textiles, blue top bin, glass, paper and garden waste)	34.84 %
Energy recovery (includes refuse, rejected recycling, bulky waste, street sweepings, fly tipped waste)	56.56 %
Landfill (includes waste from HWRC and bottom ash)	8 %*
Total waste	100 %

(\*landfill figure is estimated for Fareham as data is only available for Hampshire)

### Step 4 – Decide Whether Separate Collection of the 4 Materials is Required

The current collection system operating across the Borough provides high quality recyclate which is sent for sorting and reprocessing at a local MRF. The income received from the sale of the recyclate is of a significant value, providing evidence of the high quality of the product. The recyclate is independently assessed periodically by DEFRA and considered to be of a consistently high quality.

The introduction of separate collections of the recyclate across the Borough would not be technically, environmentally and economically practicable (TEEP). This is due to:

- a. The significant capital and revenue costs and potential loss of income that would be incurred.
- b. The practical issues of implementing a new collections system in terms of communication with residents and the significant period of service disruption that would result from the collection of redundant bins and allocation of new boxes. It is estimated that this period would need to be at least six months in order to cope with the logistics of the changeover.
- c. Additional vehicle movements increasing the carbon emissions of the vehicle fleet.

The review of current collection arrangements contained in this report confirms that changing to separate recycling collections is not necessary to achieve high quality recyclates and is not technically, environmentally and economically practicable (TEEP) As a consequence it is recommended that separate collections of recyclate are not implemented in Fareham at this time.

### Step 5 – Obtain Sign Off

Report to Streetscene Policy Development and Review Panel 23 October 2014

Report to Executive 1 December 2014

#### **Step 6 – Retain Evidence**

All research materials and evidence will be retained in the Council's records, along with copies of the Report to the Executive and Streetscene Panel which are available electronically.

### Step 7 - Re-evaluation Process

Officers will assess any proposed collection policy changes against the new regulations prior to any recommendations being put to Members for decision.