

FAREHAM

BOROUGH COUNCIL

Report to Streetscene Policy Development and Review Panel

Date **23 October 2014**

Report of: **Director of Environmental Services**

Subject: **WASTE REGULATIONS (ENGLAND AND WALES) 2011**

SUMMARY

This report outlines the changes to the Waste Regulations (England and Wales) 2011 that require waste collection authorities to collect recycled waste paper, metals, plastic and glass separately from 1 January 2015.

RECOMMENDATION

That the Panel:

1. Considers the contents of the report and agrees that separate collections of recyclable materials should not be introduced in the borough at this time because:
 - a. It is not necessary to provide high quality recyclates; and
 - b. Would not be technically, environmentally and economically practicable (TEEP).
2. Recommends to the Council's Executive that:
 - a. No changes are required to the collection of recyclable materials currently co-mingled in blue top recycling bins; and
 - b. Any collection policy changes proposed in future are assessed against the new regulations prior to any decision being made.

INTRODUCTION

1. The Waste Regulations (England and Wales) 2011 transposed the EU Waste Framework Directive into English law and imposed duties on waste collection authorities (WCA) and waste disposal authorities (WDA) to follow the waste hierarchy in relation to the collection of waste. Details of the waste hierarchy can be found at Appendix (A).
2. In October 2013, Lord de Mauley (Parliamentary Under Secretary for the Department for Environment Food and Rural Affairs) wrote to all local authorities advising of the changes to Regulation 13 of the Waste Regulations (England and Wales) 2011. A copy of this letter can be found at Appendix (B). The amended regulation states:
3. From 1st January 2015 an establishment or undertaking which collects waste paper, metal, plastic or glass must do so by way of separate collection. These requirements apply where separate collection:
 - a. is necessary, in effect to provide high quality recyclates; and
 - b. is technically, environmentally and economically practicable (TEEP)
4. The amendment to Regulation 13 does not prohibit the co-mingled collection of these items, but requires councils to demonstrate that separate collection is not necessary or TEEP in their area.

GUIDANCE FOR LOCAL AUTHORITIES

5. The Department for Environment, Food and Rural Affairs (DEFRA) do not intend to issue detailed guidance for local authorities when considering the implications of the Regulations. A working group consisting of members from Waste and Resources Action Programme (WRAP), London Waste and Recycling Board (LWARB) and the Waste Network Chairs have produced a document known as the Waste Regulations Route Map. The published Route Map is not legal advice but is designed to help authorities understand their legal obligations. A copy of the Route Map can be found at Appendix (C).
6. Streetscene Officers have worked alongside Project Integra and Hampshire County Council Officers to apply the Route Map and ensure that each criterion is being met, that evidence is available to ensure that Fareham Borough Council meets the two requirements of providing high quality recyclate and that the current collection methods fit the TEEP criteria. A separate documentation pack is being prepared to support the Council's evidence of compliance with the regulations. It is anticipated that this pack will be finalised shortly.

CURRENT RECYCLING COLLECTION

7. Fareham Borough Council currently collects recycling from residents as part of the alternate weekly collection schedule which co-mingles the recyclate. Items that can be recycled via the blue top recycling bin include: paper, card, tins, cans, aerosols and plastic bottles. The recyclate is collected and then sent for sorting and reprocessing at the Materials Recovery Facility (MRF) in Portsmouth.

8. Residents are able to dispose of green waste via the fortnightly garden waste service. Glass can be recycled via glass banks located at 31 locations across the Borough. Textiles are collected at 40 sites across the Borough. Bulky waste and other household waste can be disposed of via Household Waste and Recycling Centre (HWRC) sites or by using the bulky waste collection service provided by the Council.

QUALITY OF RECYCLATE

9. The MRF in Portsmouth is operated by Veolia Environmental Services (VES) and works in Partnership with Hampshire County Council to ensure that the quality of recyclate is maintained at a high standard to ensure good value is obtained for the end product. Each day samples are analysed to ensure that the output of the MRF meets the specifications of the reprocessors. Currently the recyclate is supplied to over 60 reprocessing destinations across the UK, with the price and grade of product continually monitored and updated.
10. The dry mixed recyclate (DMR) is collected without glass, which improves the grade of paper produced, maximising the value obtained from sorting and reprocessing. Once the recyclate has been sorted it is baled on site at the MRF, which increases the value of the product as it is easier to transport to the buyers.

FEASIBILITY OF IMPLEMENTING SEPARATE COLLECTIONS

11. To ensure that the requirements of Regulation 13 are met, the feasibility of implementing separate collections in the Borough has been investigated. This investigation is Step 4 of the Waste Regulations Route Map as referred to in Appendix (C) and evaluates whether or not such an arrangement would be TEEP.

TECHNICAL REQUIREMENTS

12. The current MRF in Portsmouth where the recyclate is sent for sorting and processing would require technical changes to permit the separate recyclate streams to be processed.
13. Investigations into the feasibility of refitting and adapting the MRF to process the separate recyclate streams are being carried out by VES and currently the timescale and costings of this project are unavailable. Any modifications necessitated by a change to collection arrangements by waste collection authorities would be the responsibility of Hampshire County Council.

ENVIRONMENTAL ISSUES

14. Carbon footprint is defined as the total amount of greenhouse gases (predominantly carbon dioxide CO₂) produced to directly and indirectly support an activity. It is measured in tonnes of carbon per year. The number of vehicles that will collect recycling would remain the same at 4 vehicles, but the number of journeys to the MRF to deposit the material would increase. This is due to the reduced capacity of the side loading vehicles as the recyclate is not compacted. It is estimated that the total mileage driven each year would increase by 17,000 miles which equates to an additional 75 tonnes of carbon produced per year.

ECONOMICAL ISSUES

15. Changing recycling collections from the blue top recycling bin to separate collections of each type of recyclate would require each household to sort the recyclate into three boxes for paper, metals and plastic bottles. To assist in the collection of these items, stackable boxes would be supplied to each household to replace the blue top recycling bin.
16. These recycling boxes would be collected by a side loading recycling collection vehicle instead of the rear loading bin hoist collection vehicle currently in operation. The side loading vehicle is compartmentalised to allow collection of separate materials that can then be deposited separately at the MRF. Presently recycling crews are made up of two loaders and one driver. To facilitate the additional sorting of recyclate into the compartments of the vehicle, an additional loader would be required for each of the 4 crews.
17. Due to the smaller capacity of the split body recycling vehicles, it is anticipated that each vehicle would need to tip up to three times per day; currently recycling vehicles only tip once or twice depending on the load collected. This will increase the length of the working day for the recycling crews and also the Supervisors in the office. It is estimated that 1.5 hours overtime per day would be required for each recycling crew to be able to collect and transport the recyclate to the MRF.
18. Collecting recycling separately across the Borough would require significant operational changes and this message would need to be communicated to residents to assist in the change. It is estimated that 4 Waste and Recycling Officers would need to be employed for 6 months, to help promote the change of collection regime, answer customer enquiries and facilitate the changeover from wheeled bins to stackable boxes. Publicity materials would need to be produced and a co-ordinated communication plan implemented at the same time as changes to the operation occurring.
19. Further costs would be incurred to adapt and refit the MRF in Portsmouth to allow for each of the 3 separate recyclates to be sorted and reprocessed for sale. Initial investigations of the capital and revenue costs associated with this project are currently being conducted by Hampshire County Council as the WDA, but figures are not yet available.
20. There is evidence from other waste authorities that collecting recyclate separately reduces the amount of recycling collected. This is partly due to the reduced capacity available to residents. The capacity of a blue top recycling wheeled bin is 240 litres, with the total capacity of 3 stackable boxes being 120 litres.
21. In 2007 "Remade Scotland", a major initiative funded by the Scottish government who are charged with stimulating, developing and strengthening markets for recyclates in Scotland, conducted a review of 29 local authorities' kerbside recycling schemes. The study revealed that an average of 2.32 kg per household per week of recyclate was collected from co-mingled collections sorted at MRFs, compared to 1.43 kg per household per week for separate collections of recyclate. This equated to a reduction in weight collected of 38%.
22. A reduction of this magnitude in Fareham would result in an additional 2,700 tonnes of recyclable material going to incineration. There would be a consequential loss of

revenue income to the council every year based on current prices achieved for the recycled material. In addition, the council's headline recycling rate would fall by something in the region of 10%.

23. The four existing recycling vehicles used to collect blue top recycling bins which would be replaced by the bespoke recycling vehicles would be disposed of. This would generate a one-off capital receipt.
24. Details of the estimated costs of the implementation described above can be found at Appendix (D).

PRACTICAL ISSUES

25. The bespoke split body recycling vehicles on the market are wider than current refuse collection vehicles; this could result in several areas of the Borough being unable to participate in separate collections of recycling. Further investigations would be required to ensure that all parts of the Borough could be accessed using a narrow access vehicle, which would collect only one stream at a time, increasing the mileage and CO₂ emissions relating to recycling collections and possibly requiring three separate collections per week to collect the recyclate.
26. The introduction of separate collections would require each household to store 3 individual boxes for recycling alongside their existing green wheeled bin for refuse, which could be more difficult to store than current recycling methods.
27. An additional complication to the change of collection method is the collection and disposal of the 48,000 redundant blue top recycling bins currently in use. This would have to occur at the same time as the roll out of the stackable boxes for separate collection. Due to logistical difficulties of this task, it would need a phased roll out of the new collection system, requiring both recycling collection systems to work alongside each other for a period of time. The resale value of the redundant blue top recycling bins would be minimal and there is no indication at present that the revenue would cover more than the disposal cost of the bins.

CONCLUSION

28. 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.
29. 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.

30. 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.

Background Papers:

PI Separate Collections Documentation Pack (to follow)

Reference Papers:

[Remade Scotland Report 'Kerbside Collections – Factors for Success'](#)

Appendices:

Appendix (A) – The Waste Hierarchy

Appendix (B) – Lord de Mauley letter to Local Authority Bodies

Appendix (C) – Waste Regulations Route Map

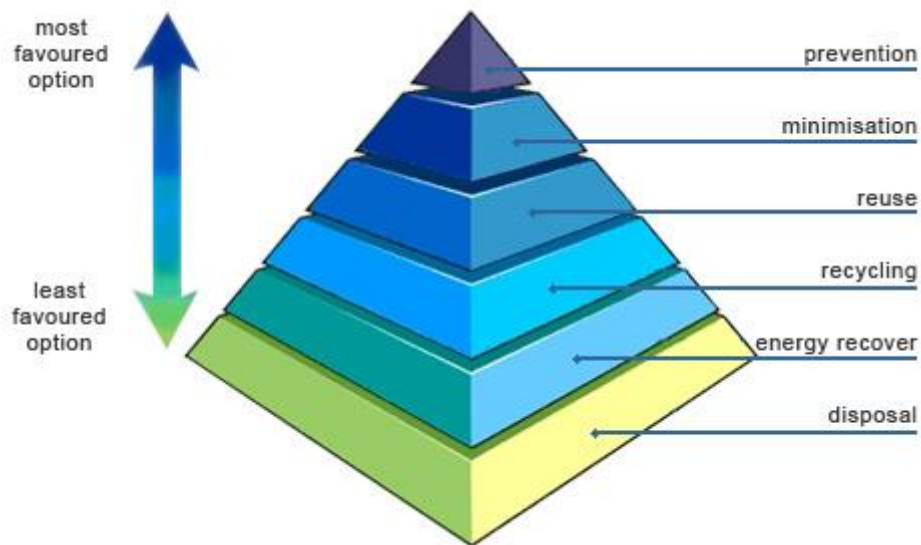
Appendix (D) – Estimated Costs

Enquiries:

For further information on this report please contact Kitty Rose. (Ext 4747)

APPENDIX (A) – THE WASTE HIERARCHY

The Waste Hierarchy is a process used to protect the environment and conserve resources through a priority approach established in waste policy and legislation. It has been part of the European Union’s Waste Framework Directive since 1975 and in 2008 the stepped process outlined in the pyramid diagram below was introduced.



The Waste Hierarchy has been 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 recycling 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)

APPENDIX (B) – LORD DE MAULEY LETTER TO LOCAL AUTHORITY BODIES



Department
for Environment
Food & Rural Affairs

Nobel House
17 Smith Square
London SW1P 3JR

T: 08459 335577
helpline@defra.gsi.gov.uk
www.defra.gov.uk

October 2013

**From Lord de Mauley
Parliamentary Under Secretary**

I understand that many local authorities are currently looking at their arrangements for collecting and disposing of waste.

Since 2000 the national household recycling rate has risen from 11% to 43%. This is a massive increase and local authorities should be proud of the part they have played in achieving it. But there is no time for complacency. The increase in recycling rates has slowed. To reach our EU target, recycling 50% of all household waste by 2020, will require sustained effort and, whilst we have seen the amount of recycling increase, this has not been accompanied by an increase in the quality of recyclates coming through.

So we need to push ahead on all fronts, driving up both quantity and quality whilst driving down costs. To build up our local and rural economies we want our domestic glass and paper industries to be able to rely on a consistent supply of a good standard of recyclates produced here, without resorting to imports. Local authorities have an important role to play in achieving this, but they will need good information about what happens to the recyclates they collect.

It is for that reason that we are hoping to publish new regulations this winter, requiring information about the quality of recyclates that our Material Recovery Facilities produce. It is also the reason why we fully support the new requirements for the separate collection of waste paper, plastic, glass and metal.



The revised Waste Framework Directive (2008/98/EC) in effect requires member states to set up separate collection where necessary and practicable. Supporting European Commission guidance was published in June 2012.

The Government and Welsh Government transposed these requirements through the Waste (England and Wales) Regulations 2011, as amended by the Waste (England and Wales) (Amendment) Regulations 2012.

It appears that some local authorities may be taking the view that co-mingled collections of paper, glass, plastic and metal waste streams will remain permissible in all circumstances after 1st January 2015. I therefore thought it would be helpful now to remind local authorities of the effect of the Regulations.

From 1st January 2015 an establishment or undertaking which collects waste paper, metal, plastic or glass must do so by way of separate collection. These requirements apply where separate collection:

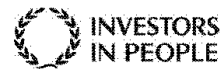
- (a) is necessary, in effect, to provide high quality recyclates, and
- (b) is technically, environmentally and economically practicable.

Where waste paper, metal, plastic or glass has been collected separately all reasonable steps must be taken to keep that stream separate from other waste streams wherever this is necessary to provide high quality recyclates.

It is clear that the intention is that these requirements should represent a high hurdle. I am aware that co-mingled metal and plastic are relatively easy to separate at a MRF. However, at present many of our existing MRFs struggle to keep glass shards out of the paper stream. In addition many MRFs produce low quality mixed glass which needs further sorting and can be uneconomic to re-smelt. I look to local authorities actively to address these problems, by the effective implementation of the new regulations and by tackling problems with operating practices.

Separate collection does not of course mean that each household will need more bins. For example, many areas have kerbside sort systems where materials are sorted before being loaded into the waste collection vehicle. The WRAP website is a useful source of help.

Any local authorities considering new collection or disposal plans should take care to ensure that they are placing themselves in a position to fulfil their legal duties from 2015. This is particularly important for local authorities who may be considering moving away from separate collection, or including glass within a co-mingled stream. Local authorities should consult their own lawyers as necessary, and should keep a clear audit trail given the potential for legal challenge.



I am aware that this is a challenging time for local government as budgets reduce and expectations increase. I would urge all local authorities to work more closely with each other to sharpen procurement practices and share both facilities and services where possible.

I hope this is helpful to you and would be grateful if you could share this message with your members.

Prunfest de Manley



APPENDIX (C) – WASTE REGULATIONS ROUTE MAP



APPENDIX (D) – ESTIMATED COSTS

Additional costs of separate collections of 3 types of recyclate

Capital Costs

5 bespoke side loading recycling collection vehicles	£660,000
48,000 stackable boxes (3 per household for each recyclate material: paper, metal and plastic)	£432,000
Publicity and communications	£30,000
4 temporary staff for 6 months to help with transition to separate collections (Local Grade 4)	£67,800
Total Capital Costs	£1,189,800
One-off capital receipt for disposal of 4 current recycling vehicles	(£40,000)
Total	£1,149,800

Annual Revenue Costs

Additional 4 loaders for recycling crews (Local Grade 2)	£109,600
Overtime costs for 4 recycling crews	£28,400
Potential loss of recycling income	£114,000
Total	£252,000