# PAPER NO. WRWA 856

# **WESTERN RIVERSIDE WASTE AUTHORITY**

REPORT (C	neral Manager			
9 <sup>th</sup>	General Manager (Contact Mark Broxup - Tel. 020 8871 2788) 9 <sup>th</sup> July 2018			
SURIFCI	port outlining progress with operations and other matters ce the previous meeting of the Authority.			
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STATUS	Open
BACKGROUND PAPERS	None

#### **EXECUTIVE SUMMARY**

- 1. This paper brings Members up to date on operational and other matters which, in themselves, do not warrant production of a separate paper. The majority of these matters are for Members' information, but where approval is sought this is referred to in the report. The specific matters covered in this report are:
  - a) Operations
  - b) Aerosols
  - c) Triad Payments
  - d) China's Ban on Imports of Certain Waste Materials
  - e) Performance Monitoring
  - f) Joint Waste Policy Support
  - g) Presentation by Mr Steven Bates Envirocomms
  - h) Schools Programme
  - i) Recycle Western Riverside
  - j) Constituent Council New Recycling Initiatives
  - k) London Assembly Environment Committee
  - I) The European Parliaments' Circular Economy Package
  - m) The Mayor Of London's Environment Strategy
  - n) English Resources and Waste Strategy
  - o) Safeguarded Wharfs Review
  - p) Sale of Cory Riverside Energy
  - q) Cory Riverside Energy's plan for a new Energy Park
  - r) Annual Members Visit
  - s) Pensbury Place
  - t) "Tackling the Plastic Problem"
  - u) General Data Protection Regulations 2018
  - v) Items costing between £5,000 and £30,000

#### **OPERATIONS**

### <u>Transfer Stations/ Materials Recycling Facility (MRF)</u>

2. There has been no major disruption in service to the main Transfer Stations' operations since the last Authority meeting.

# Riverside Resource Recovery Facility (RRRL) – Planned Outages 16<sup>th</sup> to 20<sup>th</sup> July 2018

3. The Authority's waste management contractor, Cory Riverside Energy (Cory), is undertaking the first overhaul and cleaning of the turbine and generator at the Belvedere Energy from Waste (EfW) Facility since commissioning in 2013 and there will be no electricity generated from 16<sup>th</sup> June to 20<sup>th</sup> July 2018 - 33 days in total, including cool down and start up. There will be no interruption to the combustion process and the Authority's waste will be handled as normal.

#### **AEROSOLS**

- 4. At the last Authority and Cory Riverside Energy liaison meeting in April 2018, Cory's General Manager requested that the Authority and the constituent councils stop collecting aerosol cans in the comingled recycling stream, due to a number of flash explosions that have taken place in MRF's in the United Kingdom in the last few years. Not all of these incidents have been documented and some events are based on anecdotal accounts of explosions or flashes. However there are a number of documented incidents, including one event that took place at the Smugglers Way MRF on 19<sup>th</sup> January 2018. Close circuit TV (CCTV) footage captured an explosion of some force in a baler during the baling of metals. It seems likely that the incident was as a result of an aerosol rupturing and then releasing a flammable gas such as butane; it is thought that the gas was then ignited by friction sparks from the compaction of the metal in the baler load chamber which caused the explosion. Had an employee been standing by the baler when the explosion occurred, it is likely that the employee would have been seriously injured. There are several cases documented where exploding aerosols have caused fatalities, e.g. in 2010 an aerosol exploded in a baler at a scrap metal yard in Saltney, Chester, resulting in the death of an employee.
- 5. There were two serious fires at the Smugglers Way MRF in the Summer of 2016. The first fire caused sufficient damage to close the MRF for over two weeks and, when re-opened, it was only partially operational for some ten months until it was fully refurbished in May 2017. After a lengthy investigation by the London Fire Brigade and Cory's compliance team, the cause of the second fire was inconclusive, but there was a theory that the cause may have been due to an aerosol exploding.
- 6. Currently the Authority and the constituent councils ask that residents place aerosols in recycling sacks and communal bulk containers for recycling. This is communicated in all the publicity material sent out to residents, including images on the boroughs' clear recycling sacks, signage on the community bulk recycling bins and on the

Authority and Council websites. If the Authority changed this message to remove Aerosols from all the communications material it will take some time before all the clear sacks that promote the recycling of aerosols would be used up. It has been explained to Cory that the Authority could not guarantee that aerosols will not be placed in the comingled stream if the Authority decided to stop collecting them for recycling.

- 7. Based on the data extracted from a Waste Composition survey carried out in 2014, the total amount of ferrous and non-ferrous aerosols in the comingled recycling stream is less than 0.5% of the total material delivered to the MRF. This would represent approximately 300 tonnes a year that would be sent to the Belvedere EfW Facility plant at an additional estimated cost of £36,150 per year.
- 8. Metals that are not separated out for recycling and are placed in the residual waste stream (black bags) are processed at the Belvedere Energy from Waste plant where waste is processed to generate electricity. One of the main by-products is called incinerator bottom ash (IBA). IBA is the ash that falls from the base of the grate during the incineration process. Once collected, the IBA is loaded onto containers and taken to a processing facility at the Port of Tilbury in Essex. The metals are separated and then sent on for recycling and this material counts towards the calculation of recycling performance so there will be no loss in that respect.
- 9. Due to the high level of risk of fire and concern for the safety of employees Authority officers recommend ceasing the collection of aerosols in the comingled recycling stream. This will require an amendment to all communications material and the production of a statement explaining why the decision to remove aerosols had been taken, highlighting the fire and employee safety risks associated with the handling of aerosols in the MRF. It will be explained that the aerosols will still be recycled via the EfW process. Members are therefore recommended to agree to Cory's request to stop the collection of aerosols in the comingled recycling stream and to the revision of all communications material to reflect this decision.

#### TRIAD PAYMENTS

10. The Authority's residual waste (that which cannot be reused or recycled) is used to generate electricity at the Energy from Waste plant at Belvedere in the London Borough of Bexley operated by Riverside Resource Recovery Limited (RRRL). As part of the Authority's contractual arrangements with Cory it receives a proportion of any Triad income Cory receives.

- 11. As reported elsewhere on this agenda (Paper No. WRWA 855) the Authority receives a rebate from RRRL in relation to 'Triad payments' which are due to the Authority as part of the 'Energy uplift refund' under the Waste Management Services Agreement. RRRL successfully met the specific test of energy generation on three particular days of the year set by the National Grid which are passed over to WRWA in proportion to the Authority's tonnage levels at the plant. The Triad element represented £1.5 million of the total £1.7 million Energy uplift refund for 2017/18.
- 12. However, the Office of Gas and Electricity Market (Ofgem) announced in 2017 that it would be cutting the value of these Triad payments from April 2018 by roughly a third each year over the course of the following three years (overall from around £45/kW to £3/kW).
- 13. A number of smaller generators challenged this decision but, following a hearing in April 2018, an application for judicial review of Ofgem's decision was rejected by Mr Justice Lavender in a ruling handed down on 22<sup>nd</sup> June 2018.
- 14. Assuming there is no successful appeal, and all other factors being equal, the Authority's triad income would reduce to around £1 million in 2018/19, £500,000 in 2019/20 and £100,000 thereafter.

#### CHINA'S BAN ON IMPORTS OF CERTAIN WASTE MATERIALS

- 15. It was reported at the Authority meeting in November 2017 (Paper No. WRWA 843), that China had notified the World Trade Organisation that it would ban imports of 24 categories of recyclables and waste by the end of 2017, as part of its Environmental campaign to reduce the amounts of "dirty waste and hazardous waste" that have been found mixed with the recycling material exported to China.
- 16. As reported at the Authority's February 2018 meeting (Paper No. WRWA 850), due to the increased coverage in the national press and media as a result of the impending ban, a statement was published on the Authority's website in December 2017, http://www.wrwa.gov.uk/news/chinas-ban-dec-2017.aspx.
- 17. At the time of writing the only significant update to the statement is that the price for the lower grade paper (mixed paper) fell very low during March and April 2018, but picked up again in May 2018. Market prices are available to view at <a href="www.letsrecycle.com/prices/">www.letsrecycle.com/prices/</a>. Cory also had nothing further to add to the information in the statement.

#### PERFORMANCE MONITORING

#### Introduction

- 18. Detailed performance monitoring is shown at Appendix A to this report. The tables shown set out:
  - a. the tonnages of each waste type (including co-mingled recycling contamination) delivered by each constituent council in the current financial year to date, together with projected outturn tonnages, compared against those budgeted for and the previous financial year's outturn;
  - b. the projected annual cost for each commodity, compared to what these would be if the Authority's budgeted tonnage of each commodity was received;
  - forecast tonnages for future years, adjusted simply by the number of working days in each year; the major waste type and co-mingled contamination tonnages are also shown on a monthly as well as an annual basis;
  - d. comparisons of the tonnage of each major waste type handled by each constituent council on an annual basis;
  - e. comparisons by borough of the tonnages of Locally Authority Collected Waste (LACW), household and non-household waste, household waste arisings per dwelling and per person; and
  - f. weight-based recycling performance on a household and LACW basis.

#### Points to Highlight

19. Whilst General Waste (the residual waste that cannot be reused or recycled and is sent for energy recovery) accounts for 77% of the delivered waste stream it accounts for almost 93% of the Authority's costs after allowing for the treatment of the contamination within the co-mingled recycling. By comparison co-mingled recycling accounts for 18% of the delivered tonnage, but only accounts for 4% of the Authority's costs.

- 20. From tonnage data to date we are predicting a 1.3% reduction in total waste handled by the Authority in 2018/19 from that budgeted for and a 1.7% reduction in General Waste. The levels of reductions vary across the constituent councils with, for example, Hammersmith & Fulham and Kensington and Chelsea have predicted to have 2.3% and 1.0% reductions in General Waste respectively.
- 21. General Waste for 2018/19 at the Household Waste and Recycling Centre is predicted to be nearly 17% below that predicted in the budget and the total waste figure is down by around 8% (possibly due to General Waste successfully being diverted into the reuse and recycling waste streams). However, these figures could change in time as there is a great deal of seasonality in the HWRC figures, with the prolonged spell of hot weather also likely to a factor in this reduction.
- 22. The tonnage of co-mingled recycling collected by Lambeth is down on the forecast for 2018/19, by 3.5%. Kensington and Chelsea's is down by 2.4% and Hammersmith and Fulham by 1.3%. In contrast, Wandsworth's predicted forecast is up by 1.6%. Contamination levels are generally better than the corresponding period last year with an overall figure of 13.6% predicted for 2018/19.

#### **JOINT WASTE POLICY SUPPORT**

- 23. In June 2017, the Authority considered a Recycling Performance report (Paper No. WRWA 832) which led to a seminar being held for Authority Members on 14<sup>th</sup> September 2017, the outcomes from which were discussed at the Authority's September 2017 meeting (Paper No. WRWA 838). Authority officers subsequently met with officers from the constituent councils, on 4<sup>th</sup> October 2017, to discuss the matter further.
- 24. In January 2018, following a procurement exercise as detailed at the last Authority meeting (Paper No. WRWA 850), Ricardo were appointed to advise on:
  - the accuracy of the data used to prepare this report and the reasonableness of the conclusions drawn from it;
  - any differences in performance between the constituent councils on different waste types;
  - the suitability of having a range of performance targets, as opposed to the current 'one size fits all' weight based recycling target;

- the enhancement of the current recycling programme, with a new focus on a number of waste minimisation initiatives;
- 25. It was hoped that a full report would have been completed for this Authority meeting, but the project has been delayed due to the time it has taken to obtain data from the Boroughs. A full report will be presented to the next Authority meeting.

#### PRESENTATION BY MR STEVEN BATES, ENVIROCOMMS

- 26. At the last Authority meeting Members instructed officers to accept the Communications Support proposal from Ecocommunications and Envirocomms (now Envirocomms) and develop the various workstreams detailed in their proposals, in order to present the outputs at this meeting for Members' approval.
- 27. Mr Steven Bates from Envirocomms will attend the Authority meeting to present "Creative Concepts" to Members. Members will then be asked to provide feedback to allow fine-tuning of the ideas and approve the concepts to enable the campaign to launch in the Autumn.

#### **SCHOOLS PROGRAMME**

- 28. The Education Team has had another very busy year, with even more tours and visits than 2016/17 thanks to better use of the education room.
- 29. The programme has been fully booked for the last two terms, and the Team have been successful in attracting new schools to the programme this year, with eighteen new primary schools and three new secondary schools taking part. The Team will once again be targeting new schools for the next academic year.
- 30. The Team have worked with 74% of state primaries across the four boroughs since the programme began in 2013, ranging from 67% in Lambeth primaries to 77% in Wandsworth.
- 31. By the end of this school year they will have had 125 class visits at Smugglers Way (up from 103 in the 2016/17 academic year), from 69 different schools.

- 32. The Education Team will have run 28 assemblies and 285 workshops in 71 schools (up from 214 workshops in the 2016/17 academic year). This includes eight Bin Detectives sessions and two Food Waste Detectives sessions, where children sort and weigh all the rubbish from around the school and really get a feel for how much is thrown away and what they can do to improve their school's waste management.
- 33. Altogether this year the Team have spoken face to face to approximately 13,000 local children about the importance of reducing, reusing and recycling our waste. There has been lots of interest from local residents and community groups about what happens to their waste, particularly in response to media attention on the issues of plastic waste, and they continue to run regular visits into the MRF, as well as talks to community groups and local organisations. Appendix B details all the Schools taking part in the WRWA Education Programme in 2017/18
- 34. The Team will be updating the workshops offered for the next school year to include content on composting, food waste and reducing the use of plastics.

#### **RECYCLE WESTERN RIVERSIDE (RWR)**

#### Recycle for London (RfL) Campaign – Managed by Resource London

- 35. At the January 2017 Authority meeting (Paper No. WRWA 823) Members approved the adoption of the Recycle for London (RfL) and WRAP's campaign (Resource London's communications brand) by RWR to assist with communicating a consistent message across London.
- 36. RfL launched its new campaign, called 'One Bin is Rubbish' (OBIR), on 6<sup>th</sup> November 2017; the campaign focuses on in-home storage and encourages residents to sort out another bin (or equivalent) for recycling in their home. The campaign is targeted at 18 to 44 year olds, as research carried out by Resource London suggests this age group is less likely to recycle unless there is an available in-home recycling bin.
- 37. As reported at the last Authority meeting, Resource London awarded the Authority funding of £15,000 to assist with launching the OBIR campaign in Hammersmith & Fulham, Lambeth and Kensington and Chelsea. The RWR budget funded the campaign in Wandsworth, which is not currently a "priority" borough for RfL, as it has insufficient numbers of the target group. To date, the OBIR campaign has been advertised across the four Boroughs on the following:
  - vehicle panels in Kensington and Chelsea, Lambeth and Wandsworth

- 41 Bus Shelter Adverts in Hammersmith & Fulham
- 28 Bus Shelter Adverts each in Kensington and Chelsea, Lambeth and Wandsworth
- adverts on the Authority and borough websites, Twitter pages and Facebook account
- adverts in borough and local publications.
- 38. In May 2018, Resource London reported the results of Year 1 of the three year OBIR campaign. The main objective for Year 1 was to get people aware of the need to change by building campaign awareness and reach. Resource London has reported that they met their Key Performance Indicators relating to this objective. The objective of Year 2 is to build social norms, motivation and understanding so people both prepare to act and start acting. The objective of Year 3 is to build understanding and capability to increase and (then) maintain recycling levels.
- 39.RWR will continue to promote the OBIR Campaign throughout 2018/19 using the budget approved at the last Authority meeting and seek funding support from Resource London.

# Recycle Week – $24^{th}$ to $30^{th}$ September 2018.

- 40. WRAP announced that the focus of this year's Recycle Week campaign will be on plastics under a theme of 'Recycling. We do. Because it matters'.
- 41. The theme is designed to capture attention and put across simple but important messages about why recycling matters. The aim is to break some myths and demonstrate why recycling plastic is beneficial; that is, keeping it in use and out of our environment. RWR will support the campaign during Recycle Week and will seek funding to support the RWR budget.

#### **CONSTITUENT COUNCIL NEW RECYCLING INITIATIVES**

42. At the meeting of the Authority on 22<sup>nd</sup> September 2010 (Paper No. WRWA 669A) Members instructed the Clerk to write to each of the constituent councils to inform them that, in future, should they wish to make arrangements themselves to recycle any significant tonnage of waste then, in accordance with Section 48 of the Environment Protection Act 1990, they must, as soon as reasonably practicable, notify the Authority in writing. The Authority will then approve or object to any such proposal at its next available meeting. The Clerk wrote to the constituent councils, as instructed, on 27<sup>th</sup> October 2010.

- 43. Following approval from the Authority, Kensington and Chelsea commenced a food waste pilot on 6<sup>th</sup> February 2018, collecting from 1,700 single occupancy homes in the south of the Borough. Kensington and Chelsea report that participation in the Food Waste Trial is around 30% of the 1,700 properties and is generating approximately two tonnes of food waste each week.
- 44. Two waste composition surveys, funded by the Authority, were carried out in January and May 2018 and a further survey will be carried out in October 2018. As previously reported, this is to test a theory that the introduction of food waste collections can have a beneficial effect on behavioural change i.e. that residents are likely to re-focus attention on dry recycling, as well as food waste separation and reduction.
- 45. The second waste composition survey was carried out during the week commencing 21<sup>st</sup> May 2018, the week following the Royal Wedding and the F.A. cup final a weekend when the weather was very good. The second survey shows a large increase in the amount of garden waste in the residual waste stream, from 4.71% in the first sample to 27.3% in the second sample, which is a seasonal variation. Food waste in the residual waste reduced from 36.65% to 26.71%. Glass increased in both the residual and recycling streams and is a likely result of the two big national events and the good weather. A full analysis will be carried out following the third survey, to assess the full effect of the food waste trial on behavioural change.
- 46. Kensington and Chelsea wrote to the Authority on 5<sup>th</sup> July 2018 seeking approval to commence a second food waste collection pilot in September 2018. The new pilot area would focus on approximately 1,700 properties which have sufficient external space to store a caddy. The area chosen is highlighted in Map 1 attached as Appendix C and consists of properties of single occupancy and small multi-occupancy properties (up to four flats). This covers properties in Dalgarno, St Helen's, Notting Dale and Norland wards.
- 47. Based on the pilot in the South of the Borough, Kensington and Chelsea estimate that they will collect up to two tonnes of food waste per week and, as with the pilot running in the South, the food waste will be sent for Anaerobic Digestion.
- 48. On 7<sup>th</sup> April 2017, Cory wrote to the Authority referring to Kensington and Chelsea's request to pilot food waste collections up to an estimated five tonnes per week of household food waste. Cory stated "providing that the food waste is being separately collected from the General Waste (not extracted from the General Waste stream via third party sorting/processing), and on the basis that current research still

shows that Anaerobic Digestion is environmentally superior to composting and other recovery options (including Energy from Waste), Cory Riverside Energy will support this in principle". Cory also stated that if the proposed tonnages for the trial were to change they would like to be informed in order that they can plan for tonnage fluctuations at the Belvedere Energy from Waste Facility. The two pilots' actual and estimated tonnages are under five tonnes.

49. Members are asked to approve the introduction of a second food waste collection pilot in the North of Kensington and Chelsea as detailed above.

### **LONDON ASSEMBLY ENVIRONMENT COMMITTEE**

- 50.On 15<sup>th</sup> February 2018 the London Assembly published a report on Energy from Waste <a href="https://www.london.gov.uk/about-us/london-assembly/london-assembly-publications/energy-waste">https://www.london.gov.uk/about-us/london-assembly/london-assembly-publications/energy-waste</a>.
- 51. On 1<sup>st</sup> March 2018 the Authority's Chairman wrote to Members of the Committee, highlighting a concern that that the report did not fully and clearly explain the strategic importance of EfW within London. The letter is attached as Appendix D to this report,
- 52. On 21<sup>st</sup> March 2018 the Committee published another report, "Wasting London's Future" <a href="https://www.london.gov.uk/about-us/london-assembly/london-assembly-publications/wasting-londons-future">https://www.london.gov.uk/about-us/london-assembly-publications/wasting-londons-future</a>, which drew upon previous reports it had produced on the Circular Economy, household recycling collections and Energy from Waste (the report discussed in paragraphs 50 and 51 above). This report contained a number of recommendations to the Mayor of London, including three in the Energy from Waste section. All three, reproduced below, are in line with Authority policy:
  - The Mayor should set targets to reduce the total amount of biodegradable and recyclable waste sent to landfill and incineration by 2026 and set targets to further reduce the amount by later dates.
  - The Mayor should strongly support the construction and use of facilities within London's borders for the most sustainable management of its own waste.
  - The Mayor should aim for London to become a zero-waste export city, conducting research on the feasibility of this, and then set a policy to achieve as close to zero as feasible, subject to overall environmental objectives.

#### THE EUROPEAN PARLIAMENT'S CIRCULAR ECONOMY PACKAGE

- 53. The European Union (EU) considers a Circular Economy to include reducing waste to a minimum, as well as re-using, repairing, refurbishing and recycling existing materials and products. The EU believes that moving towards a more circular economy will reduce pressure on the environment, enhance security of supply of raw materials, increase competitiveness, innovation and growth, and create jobs.
- 54. On 18<sup>th</sup> April 2018 the European Parliament agreed its Circular Economy package, including recycling targets, with final approval expected by ministers in the coming months at which point it will become law.
- 55. Even though the UK is to leave the European Union, the Government has already said it will adopt the EU's Circular Economy measures. However, given Brexit, it must be doubtful that the UK would pay any fines for non-compliance.
- 56. The main features of the package are:
  - Municipal waste recycling targets of 55% by 2025, 60% by 2030 and 65% by 2035 (currently the UK is working to a 50% target by 2020);
  - Biodegradable waste (e.g. food and garden waste) will have to be either collected separately from households or home composted by 2024.
  - Both Textiles and Hazardous Waste will have to be collected separately from households by 2025.
  - No more than 10% of Municipal waste to be landfilled by 2035
- 57. There are also targets to recycle 65% of packaging materials by 2025, and 70% by 2030 with separate targets for specific packaging materials, such as paper and cardboard, plastics, glass, metal and wood. It is hoped that this will assist the Government in deciding how to best reform the UK's Packaging Responsibility Note (PRN) system to make packaging producers and retailers more responsible for recovering the material they produce.
- 58. In terms of waste reduction member states should aim to reduce food waste by 30% by 2025 and 50% by 2030 and they should provide incentives for the collection of unsold food products and their safe redistribution.

#### THE MAYOR OF LONDON'S ENVIRONMENT STRATEGY

- 59. The Mayor of London published his Environment Strategy at the end of May 2018 and he has set a target for 50% of Local Authority Collected Waste (LACW) in London to be recycled by 2030, in order to help reach an overall 65% municipal target by 2030 (which is higher than that set by the EU, see paragraph 56 above).
- 60. New Environment Agency data estimates that 41% of London's municipal waste was recycled or composted in 2016/17, which is significantly lower than the 52% that is estimated in the Mayor's strategy.
- 61. The Mayor's modelling, which is widely disputed, suggests that, if London achieves the reduction and recycling targets set out in his strategy, it will have sufficient EFW capacity to manage London's non-recyclable municipal waste, once the new Edmonton and Beddington Lane facilities are operational.
- 62. Other targets outlined in the strategy include cutting food waste by 20% by 2025 and 50% by 2030; using fewer and cleaner lorries to transport waste; and no biodegradable or recyclable waste to be sent to landfill by 2026.
- 63. To help meet the 65% target by 2030, the Mayor expects local authorities to offer collections for the six main dry recycling materials (which the Authority's constituent councils already do) as well as separate food waste collections. However, within weeks of the publication of the Mayor's strategy, Barnet Council confirmed that it would be discontinuing separate food waste collections from September 2018, as the Council reported that the service was costing around £300,000 per annum. Barnet's food waste will instead be disposed of in the residual waste stream and sent to an Energy from Waste facility. The Mayor of London has subsequently said that he:
  - ".... is concerned about the impact on recycling performance from Barnet's decision to stop separate household food collections. I do possess, through the GLA Act, the backstop power to direct authorities, where I consider it necessary for the purposes of implementing the municipal waste provisions of the London Environment Strategy. Moreover, waste authorities have a duty under that Act to undertake their waste responsibilities in such a way as to be in general conformity with the strategy. However, the use of my power of direction is clearly an option of last resort, once all other avenues have been explored and exhausted.

On the 19th of June, I wrote to the Leader of Barnet Council expressing my deep concern at their decision and requesting that it is put on hold. This will enable my officers to now start the process required of us under the GLA Act."

- 64. However, the Mayor's powers in this regard are constrained by clause 37(4) of the Greater London Authority Act 2007 (reproduced below) which makes it clear that an authority does not need to comply where the requirements would impose excessive additional costs on it.
- 65. The Secretary of State (see clause 37(5) of the Act below) has, to date, not issued guidance on what is to be regarded as "acting in general conformity" or "imposing excessive costs".

#### 37 Duties of waste collection authorities etc.

- (1) Section 355 of the GLA Act 1999 (duty of waste collection or disposal authorities in Greater London to have regard to the municipal waste management strategy in exercising functions under Part 2 of the Environmental Protection Act 1990) is amended as follows.
- (2) At the beginning insert "(1)".
- (3) For "have regard to" substitute "act in general conformity with".
- (4) At the end insert—
  - "(2) Subsection (1) above has effect only to the extent that compliance by an authority with the requirements of that subsection does not impose excessive additional costs on the authority."
- (5) After subsection (2) insert—
  - "(3) For the purposes of this section, the Secretary of State may issue guidance for determining what is to be regarded as—
    - (a) acting in general conformity with the municipal waste management strategy, or
    - (b) imposing excessive additional costs on an authority.
  - (4) In discharging the duties imposed upon it by subsection (1) above (as read with subsection (2) above), an authority must act in accordance with any guidance issued under subsection (3) above.

- (5)Any guidance issued under subsection (3) above shall be published by the Secretary of State in such manner as he considers appropriate.
- 66. The Mayor is also encouraging London's waste collection authorities to consider interventions such as reduced collections of residual waste, through bin sizes or frequency, to deliver cost savings and recycling improvements.

#### **ENGLISH RESOURCES AND WASTE STRATEGY**

- 67. The Department for Environment, Farming and Rural Affairs (Defra) is expected to publish a new Resources and Waste strategy for England in the second half of 2018. This would be a key element in the Government's environmental policy following the publication of its Clean Growth strategy in October 2017 and its 25 Year Environment Plan in January 2018.
- 68. It is not known what, if any, consultation the Government will undertake prior to publication of the Resources and Waste Strategy but some may be necessary if, as expected, it proposes regulatory changes.
- 69. Building on recent collaborative work (Papers No. WRWA 791 September 2015, WRWA 798 February 2016, WRWA 802 June 2016, WRWA 813 September 2016) officers from the six statutory waste disposal authorities (who collectively manage around 15% of England's Household Waste) have secured a meeting with Chris Preston, Defra's Deputy Director for Waste and Recycling, on 11<sup>th</sup> July 2018, to present our thoughts on how some key issues might be addressed within the Resources and Waste Strategy. An oral update on this meeting will be given to the Authority.

#### SAFEGUARDED WHARVES REVIEW

- 70. There is a network of wharves along the Thames that are protected for use as a wharf by a Safeguarding Direction issued by the Secretary of State for Housing, Communities and Local Government in 2005.
- 71. An attempt was made by the then Mayor of London to update the network in 2011-13, but the Secretary of State chose not to endorse the recommended changes. The current Mayor believes that a review is overdue and is recommending some changes

- to the network and he issued a three month public consultation that closes at 5pm on Friday 3rd August.
- 72. Following consideration of the responses received, the Mayor intends to submit his recommendations for Safeguarding to the Secretary of State. It will then be for the Secretary of State to determine which wharves he chooses to safeguard and those he chooses to de-safeguard.
- 73. The Mayor is recommending the removal of the safeguarding designation from a number of wharves in the London Boroughs of Barking & Dagenham, Bexley, Havering and Newham (some only if the Silvertown Tunnel Scheme proceeds) and the protection of two wharves, not currently safeguarded, one in each of Barking & Dagenham and Newham.
- 74. Areas of both of the Authority's sites at Cringle Dock and Smugglers Way are already designated as Safeguarded Wharves but, as none of the Mayor's proposed changes will affect these sites or the Authority's wider river operations.
- 75. It is not felt necessary for the Authority to respond to the consultation but officers have drafted a letter to point out some factual errors.

#### SALE OF CORY RIVERSIDE ENERGY

- 76. On 6<sup>th</sup> June 2018 Cory Riverside Energy put out a press release announcing that it was to be acquired by consortium of long term infrastructure investors, comprising:
  - Dalmore Capital,
  - Fiera Infrastructure,
  - Semperian PPP Investment Partners; and
  - Swiss Life Asset Managers
- 77. The Financial Times reported that the sale price was in excess of £1.5 billion.
- 78. This new consortium will be the Cory's fifth set of owners since the Authority entered into its Waste Management Services Agreement with it in 2002. As previously, this change in ownership is not expected to impact the services that Cory provides to the Authority.

#### CORY RIVERSIDE ENERGY'S PLANS FOR A NEW RIVERSIDE ENERGY PARK

- 79. Cory has published plans to build an integrated, low-carbon energy park at its site in Belvedere, South East London.
- 80. The proposed Riverside Energy Park would complement Cory's existing EfW Facility at Belvedere that treats the Authority's residual waste and comprise a range of technologies, including waste energy recovery, anaerobic digestion, solar panels and battery storage.
- 81. The Riverside Energy Park would enable more of London's residual "black bin" waste to be converted into green electricity, particularly during times of peak usage, and produce cheap heat for export to nearby homes and businesses. In addition, it would continue to convert the residual ash that is left over at the end of the process into construction materials useful for building London's homes and roads.
- 82. Cory has advised the Government's Planning Inspectorate, which handles applications for this type of project, of its proposals and is currently undertaking public exhibitions and informal consultation. The application is expected to be submitted to the Planning Inspectorate during Q4 2018, following which the Planning Inspectorate will have 28 days to review the application and decide whether or not to accept it for examination. Assuming the planning process is successful, construction is targeted to begin in 2021 with the Energy Park to be fully operational by 2024.
- 83. Full details can be found on the Planning Inspectorate's website at <a href="https://infrastructure.planninginspectorate.gov.uk/projects/london/riverside-energy-park/">https://infrastructure.planninginspectorate.gov.uk/projects/london/riverside-energy-park/</a> and on Cory's website <a href="http://www.coryenergy.com/">http://www.coryenergy.com/</a> which also provides visitors with the opportunity to take virtual tours around its existing facilities, including the Authority's Materials Recycling Facility and its Transfer Stations.

#### **ANNUAL MEMBERS STRATEGY FORUM AND VISIT**

- 84. At the Authority meeting on 28<sup>th</sup> September 2016 (Paper No. WRWA 813), it was agreed that the Annual Members Strategy Forum and Visit should be left as a rolling item until Members and Officers agree a hot topic for discussion
- 85. A current hot topic relates to Cory's Riverside Energy's plans for a new Energy Park, as detailed above in paragraphs 79 to 83 of this report. It is therefore proposed to

organise a visit to the existing Energy from Waste Facility at Belvedere for Members in Autumn 2018. Members are therefore asked to consider whether they would find the visit beneficial and, if so, possible dates in October 2018 will be put forward via email for agreement following this meeting.

#### **PENSBURY PLACE**

- 86. On 20<sup>th</sup> April 2018, Cory submitted a planning application to Wandsworth Council (number 2018/1959) to construct, and operate on a 24/7 basis, a replacement waste transfer station at Pensbury Place. The application was out for consultation until 5<sup>th</sup> July 2018.
- 87. The site currently has an Environmental Permit allowing it to operate with a throughput of 182,000 tonnes per annum and Cory anticipates that the new facility will operate at, or about, this same capacity.

#### "TACKLING THE PLASTIC PROBLEM"

- 88. The UK produces millions of tonnes of single use plastic waste a year, much of which does not get recycled and instead will be littered, sent to landfill or energy from waste. Single-use plastics that have been used for only a few seconds can last centuries in the natural environment.
- 89. The Government plans to eliminate avoidable plastic waste and a key element of its plan is to examine how economic incentives can be used to encourage more sustainable behaviour. Landfill Tax was introduced in 1996 and, since 2000, the amount of waste sent to landfill has dropped by over 65% and average household recycling rates have risen from 18% to 44%. More recently, since the introduction of a 5p charge on single-use plastic carrier bags, their use has reduced by over 80%. It is in that context that the government announced a "call for evidence".
- 90. The call for evidence explores how changes to the tax system or charges could be used to reduce the amount of single-use plastics, by reducing unnecessary production, increasing reuse, and improving recycling.
- 91. The deadline for responses was 18<sup>th</sup> May 2018 and the Authority is asked to ratify the response, attached as Appendix E to this report, which was submitted by officers.

#### **GENERAL DATA PROTECTION REGULATIONS 2018 (GDPR)**

- 92. The Authority officers' took steps to ensure that the Authority was ready for the introduction of the General Data Protection Regulations on 25<sup>th</sup> May 2018. A brief outline of the procedures put in place to ensure compliance are detailed below.
- 93. The Authority is a small organisation that does not process large amounts of personal data. The procedures put in place are appropriate to the size of the organisation and the amount of personal data that is processed.

#### **Requirements & Procedures:**

#### **Data Protection Officer**

94. As a public authority the Authority is required to appoint a Data Protection Officer to inform and advise the Authority and its employees about their data protection obligations, monitor compliance with data protection regulations, and to be the first point of contact for those whose data is processed. The Clerk has been appointed as Data Protection Officer and he will be assisted on a day-to-day basis by the Authority's Executive Officer.

#### Data Processing Activities: Data Audit/Documentation

95. The GDPR makes specific requirements for the documentation of all personal data processing activities undertaken by an organisation (for example: what data is held, how it was obtained, who it is shared with). Officers have undertaken a review of all personal data held, and compiled the relevant documentation.

#### **Lawful Bases for Processing**

- 96. A key requirement of the GDPR is that the lawful basis on which personal data is processed is identified. Six lawful bases are identified in the GDPR, of which three are relevant to the Authority's data processing activities:
  - Legal obligation required to comply with the law;
  - Public task processing necessary to perform a task in the public interest or for official functions which have a clear basis in law; and

 Legitimate Interest – processing for a legitimate reason other than performing our tasks as a public authority.

#### **Communicating Privacy Information**

97. As with the Data Protection Act requirements, the GDPR require that, when personal data is collected, individuals are given information on, for example, what data is collected and how it is used. However, the GDPR include some additional items that must be communicated, such as the lawful basis for processing, data retention periods and a statement of individual's rights. To comply with these requirements, the WRWA privacy policy is being updated and will be published on the website and referred to whenever personal data is collected. The revised policy has been attached as Appendix F to this report.

#### **Data Protection Impact Assessments**

98. The GDPR require organisations to undertake a Data Protection Impact Assessment (DPIA) only if they are using new technologies, or when the data processing undertaken is likely to result in a high risk to individuals (such as profiling and large scale processing of special category data, or data relating to criminal convictions/offences). It is the view of the Data Protection Officer that this does not apply to the Authority and therefore a DPIA is not required.

#### **Subject Access Requests**

- 99. Individuals about whom the Authority holds personal data have a right to access that data and any supplementary information (for example, the lawful basis under which it is being processed) and the Authority must put in place procedures for handling any subject access requests. This right is broadly similar to the right of access that was defined in the Data Protection Act 1998.
- 100. WRWA has never received an access request and there is no reason to think this will significantly change under GDPR. A brief procedure on handling requests has been drawn up, but it is not anticipated that any new systems will need to be put in place to handle them.

#### **COMMENTS OF THE TREASURER**

101. The matters described in this report can be met from within existing approved budgets or reserves in 2018/19.

#### ITEMS COSTING BETWEEN £5,000 AND £30,000

102. The following items of expenditure have been authorised by officers under delegated powers within the band range of £5,000 to £30,000 since the last Authority meeting:-

Choice Computing	Cloud Hosting and computer Systems Support	£12,275
Zurich Municipal	Insurance – all risks and other	£27,443
KPMG LLP	External Audit Fees	£15,660

#### **RECOMMENDATIONS**

#### 103. The Authority is asked to:

- a) agree to Cory's request to stop collecting aerosols in the comingled recycling stream and revise all of the communications material to reflect this decision;
- b) approve the concepts and work streams that will be detailed in the presentation to the Authority by Envirocomms, as described at paragraphs 26 to 27 above, to enable the communications campaign to launch in autumn 2018;.
- c) to approve the introduction of a second food waste collection pilot in the North of Kensington and Chelsea, as detailed in paragraphs 46 to 49 of this report.
- d) ratify the response, described in paragraphs 88 to 91 above and attached as Appendix E to this report, which was submitted by officers in response to the call for evidence by HM Treasury on "Tackling the Plastics Problem";
- e) note the actions, described in paragraphs 92 to 100 above, taken by officers to comply with the GDPR, and to ratify the Data Privacy Policy attached as Appendix F to this report; and

f)	) otherwise receive this report as information.	
		M. Broxup
		GENERAL MANAGER

Western Riverside Transfer Station Smugglers Way Wandsworth SW18 1JS.

9<sup>th</sup> July 2018

Hammersmith & Fulham

After 3 months of 2018/2019

= Forecast Figures

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Tonnage							Budget	Projected	Projected
	2017/2018	2018/2019	2018/2019	Difference	to Budget	2018/2019	2018/2019	2018/2019	2018/2019
	Outturn	Budget	Forecast	Tonnes	Percentage	£/Tonne	Cost £	Cost £	Variance £
Batteries	1	1	-	- 1	-100%	57.50	58	-	- 58
Clinical Waste	27	27	22	- 5	-18.3%	552.00	14,904	12,183	- 2,721
Co-Mingled	11,305	11,279	11,129	- 150	-1.3%	27.00	304,533	300,491	- 4,042
Detritus Waste	733	695	805	110	15.9%	78.50	54,558	63,230	8,673
Electricals	15	17	4	- 13	-78.1%	51.00	867	190	- 677
Fridges	94	101	86	- 15	-15.1%	48.50	4,899	4,157	- 742
Gas Bottles	2	2	1	- 1	-35.1%	130.00	260	169	- 91
General Waste	58,478	58,842	57,503	- 1,339	-2.3%	147.50	8,679,195	8,481,695	- 197,500
Glass Mixed	-	-	-	-		36.50	-	-	-
Green Waste	115	207	130	- 77	-37.3%	88.00	18,216	11,413	- 6,803
Inert Waste	-	-	-	-		30.00	-	-	-
Oil & Paint	-	-	-	-		124.50	-	-	-
Paper & Cardboard	-	-	-	-		- 13.00	-	-	-
Scrap Metals	13	16	4	- 12	-75.3%	7.50	120	30	- 90
Textiles & Carpets	-	-	-	-		- 180.00	-	-	-
Tyres	-	-	0	0		280.50	-	62	62
Wood	-	-	-	-		123.00	-	-	-
Grand Total	70,785	71,187	69,684	- 1,503	-2.1%	Sub-Total	9,077,609	8,873,619	- 203,989
Contamination	1,593	1,595	1,420	- 175	-11.0%	147.50	235,240	209,426	- 25,814
				·		Grand Total	9,312,849	9,083,046	- 229,803

F	orecast Tonnes		
	2019/2020	2020/2021	2021/2022
Batteries	-	-	-
Clinical Waste	22	22	22
Co-Mingled	11,173	11,129	11,129
Detritus Waste	809	805	805
Electricals	4	4	4
Fridges	86	86	86
Gas Bottles	1	1	1
General Waste	57,730	57,503	57,503
Glass Mixed	-	-	-
Green Waste	130	130	130
Inert Waste	-	-	-
Oil & Paint	-	-	-
Paper & Cardboard	-	-	-
Scrap Metals	4	4	4
Textiles & Carpets	-	-	-
Tyres	0	0	0
Wood	-	-	-
Grand Total	69,960	69,684	69,684
Contamination	1,425	1,420	1,420

C	o-Mingled Contaminati	on			
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Apr	15.0%	13.3%	14.2%	11.6%	13.49
May	14.8%	15.5%	12.1%	15.9%	13.09
Jun	15.3%	11.3%	14.2%	12.1%	12.09
Jul	14.7%	15.3%	11.0%	13.3%	12.89
Aug	14.2%	16.3%	13.0%	17.1%	12.89
Sep	11.7%	15.7%	12.9%	11.5%	12.89
Oct	20.5%	14.7%	13.5%	15.1%	12.89
Nov	16.0%	14.7%	16.0%	13.5%	12.89
Dec	17.5%	15.9%	18.5%	16.8%	12.89
Jan	18.6%	13.3%	15.7%	16.1%	12.89
Feb	14.1%	11.9%	15.2%	13.7%	12.89
Mar	16.7%	15.0%	11.9%	12.0%	12.89
Average	15.8%	14.4%	14.0%	14.1%	12.89
				Budget	14.1%

Working Days					
	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Total	254	253	254	253	253
Diff from Year before		-1	1	-1	0
Change		-0.39%	0.40%	-0.39%	0.00%

Gene	ral Waste Tonnes			
	2017/2018	018 2018/2019 Difference		rence
Apr	4,507	4,746	240	5.32%
May	5,262	5,295	33	0.63%
Jun	5,254	4,954	- 300	-5.72%
Jul	5,106	4,994	- 111	-2.18%
Aug	4,929	4,821	- 107	-2.18%
Sep	4,885	4,778	- 107	-2.18%
Oct	5,119	5,007	- 112	-2.18%
Nov	5,081	4,970	- 111	-2.18%
Dec	4,795	4,691	- 105	-2.18%
Jan	4,832	4,727	- 105	-2.18%
Feb	3,967	3,881	- 87	-2.18%
Mar	4,742	4,639	- 103	-2.18%
Total	58,478	57,503	- 975	-1.67%

	Co-Mingled Tonnes			
	2017/2018	2018/2019	Difference	
Apr	855	900	45	5.32%
May	1,009	999	- 10	-0.95%
Jun	970	933	- 37	-3.86%
Jul	928	909	- 19	-2.06%
Aug	875	857	- 18	-2.06%
Sep	935	915	- 19	-2.06%
Oct	970	950	- 20	-2.06%
Nov	976	956	- 20	-2.06%
Dec	999	978	- 21	-2.06%
Jan	988	968	- 20	-2.06%
Feb	810	793	- 17	-2.06%
Mar	990	970	- 20	-2.06%
Total	11,305	11,129	- 176	-1.56%

Det	ritus Waste Tonnes			
	2017/2018	2018/2019	Difference	
Apr	45	66	21	45.21%
May	59	68	10	16.25%
Jun	64	53	- 11	-16.66%
Jul	74	81	7	9.32%
Aug	62	68	6	9.32%
Sep	64	70	6	9.32%
Oct	55	60	5	9.32%
Nov	67	74	6	9.32%
Dec	59	65	6	9.32%
Jan	72	79	7	9.32%
Feb	54	59	5	9.32%
Mar	57	62	5	9.32%
Total	733	805	72	9.83%

Co-mir	ngled Contamination To	onnes		
	2017/2018	2018/2019	Difference	
Apr	99	120	21	21.31%
May	160	129	- 31	-19.38%
Jun	117	112	- 6	-4.74%
Jul	124	116	- 8	-6.12%
Aug	150	109	- 40	-27.01%
Sep	107	117	9	8.65%
Oct	147	121	- 26	-17.47%
Nov	132	122	- 10	-7.72%
Dec	168	125	- 43	-25.62%
Jan	159	123	- 35	-22.20%
Feb	111	101	- 10	-8.86%
Mar	119	124	5	3.95%
Total	1,593	1,420	- 174	-10.89%

Gre	en Waste Tonnes			
	2017/2018	2018/2019	Diffe	rence
Apr	-	10	10	0.00%
May	-	6	6	0.00%
Jun	-	1	1	0.00%
Jul	-	-	-	0.00%
Aug	1	1	- 0	-2.00%
Sep	2	2	- 0	-2.00%
Oct	3	2	- 0	-2.00%
Nov	8	8	- 0	-2.00%
Dec	1	1	- 0	-2.00%
Jan	90	89	- 2	-2.00%
Feb	3	3	- 0	-2.00%
Mar	8	7	- 0	-2.00%
Total	115	130	14	12.46%

	Wood Waste Tonnes			
	2017/2018	2018/2019	Differ	ence
Apr	-	-	-	0.00%
May	-	-	-	0.00%
Jun	-	-	-	0.00%
Jul	-	-	-	0.00%
Aug	-	-	-	0.00%
Sep	-	-	-	0.00%
Oct	-	-	-	0.00%
Nov	-	-	-	0.00%
Dec	-	-	-	0.00%
Jan	-	-	-	0.00%
Feb	-	-	-	0.00%
Mar	-	-	-	0.00%
Total	-	-	-	0.00%

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Tonnage							Budget	Projected	Projected
	2017/2018	2018/2019	2018/2019	Difference	to Budget	2018/2019	2018/2019	2018/2019	2018/2019
	Outturn	Budget	Forecast	Tonnes	Percentage	£/Tonne	Cost £	Cost £	Variance £
Batteries	-	-	-	-		57.50		-	-
Clinical Waste	2	2	1	- 1	-38.0%	552.00	1,104	684	- 420
Co-Mingled	15,889	15,960	15,572	- 388	-2.4%	27.00	430,920	420,437	- 10,483
Detritus Waste	499	474	548	74	15.6%	78.50	37,209	42,999	5,790
Electricals	27	25	52	27	109.4%	51.00	1,275	2,669	1,394
Fridges	61	69	57	- 12	-18.0%	48.50	3,347	2,744	- 602
Gas Bottles	1	1	0	- 1	-93.3%	130.00	130	9	- 121
General Waste	59,730	59,884	59,299	- 585	-1.0%	147.50	8,832,890	8,746,576	- 86,314
Glass Mixed	-	-	-	-		36.50	-	-	-
Green Waste	387	423	484	61	14.4%	88.00	37,224	42,596	5,372
Inert Waste	-	-	-	-		30.00	-	-	-
Oil & Paint	-	-	-	-		124.50	-	-	-
Paper & Cardboard	-	-	-	-		- 13.00	-	-	-
Scrap Metals	1	1	-	- 1	-100.0%	7.50	8	-	- 8
Textiles & Carpets	-	-	-	-		- 180.00	-	-	-
Tyres	-	-	0	0		280.50	-	33	33
Wood	1	1	1	0	3.9%	123.00	123	128	5
Grand Total	76,597	76,840	76,014	- 826	-1.1%	Sub-Total	9,344,229	9,258,877	- 85,352
Contamination	1,943	2,027	1,700	- 326	-16.1%	147.50	298,971	250,817	- 48,153
						Grand Total	9,643,200	9,509,694	- 133,506

Fo	precast Tonnes		
	2019/2020	2020/2021	2021/2022
Batteries	-	-	-
Clinical Waste	1	1	1
Co-Mingled	15,633	15,572	15,572
Detritus Waste	550	548	548
Electricals	53	52	52
Fridges	57	57	57
Gas Bottles	0	0	0
General Waste	59,533	59,299	59,299
Glass Mixed	-	-	-
Green Waste	486	484	484
Inert Waste	-	-	-
Oil & Paint	-	-	-
Paper & Cardboard	-	-	-
Scrap Metals	-	-	-
Textiles & Carpets	-	-	-
Tyres	0	0	0
Wood	1	1	1
Grand Total	76,314	76,014	76,014
Contamination	1,707	1,700	1,700

(	Co-Mingled Contaminat	ion			•
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Apr	15.2%	13.0%	10.8%	14.7%	12.29
May	16.6%	15.7%	11.5%	11.8%	10.9%
Jun	16.4%	12.3%	11.1%	13.2%	9.89
Jul	14.0%	14.1%	11.1%	12.1%	10.9%
Aug	17.4%	10.0%	11.3%	14.3%	10.9%
Sep	16.6%	13.9%	13.1%	11.9%	10.9%
Oct	11.9%	14.3%	11.9%	14.0%	10.9%
Nov	15.5%	13.0%	12.1%	10.6%	10.9%
Dec	13.5%	14.8%	11.4%	12.3%	10.9%
Jan	14.6%	16.9%	11.8%	11.3%	10.9%
Feb	13.3%	17.5%	12.6%	11.7%	10.9%
Mar	12.6%	13.5%	13.6%	9.2%	10.9%
Average	14.8%	14.1%	11.9%	12.2%	10.9%
				Budget	12.7%

Working Days					
	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Total	254	253	254	253	253
Diff from Year before		-1	1	-1	0
Change		-0.39%	0.40%	-0.39%	0.00%

Gener	General Waste Tonnes			
	2017/2018 2018/2019		Difference	
Apr	4,492	4,858	366	8.15%
May	5,214	5,250	36	0.70%
Jun	5,282	4,997	- 284	-5.38%
Jul	5,102	5,039	- 63	-1.23%
Aug	4,980	4,919	- 61	-1.23%
Sep	4,990	4,928	- 61	-1.23%
Oct	5,371	5,305	- 66	-1.23%
Nov	5,281	5,216	- 65	-1.23%
Dec	4,917	4,857	- 60	-1.23%
Jan	5,010	4,948	- 61	-1.23%
Feb	4,298	4,245	- 53	-1.23%
Mar	4,794	4,735	- 59	-1.23%
Total	59,730	59,299	- 431	-0.72%

	Co-Mingled Tonnes			
	2017/2018	2018/2019	Differ	ence
Apr	1,191	1,266	76	6.34%
May	1,411	1,378	- 33	-2.31%
Jun	1,415	1,352	- 63	-4.48%
Jul	1,361	1,327	- 34	-2.50%
Aug	1,160	1,131	- 29	-2.50%
Sep	1,365	1,331	- 34	-2.50%
Oct	1,418	1,383	- 35	-2.50%
Nov	1,379	1,344	- 34	-2.50%
Dec	1,396	1,361	- 35	-2.50%
Jan	1,344	1,311	- 34	-2.50%
Feb	1,152	1,123	- 29	-2.50%
Mar	1,298	1,265	- 32	-2.50%
Total	15,889	15,572	- 317	-2.00%

De	tritus Waste Tonnes			
	2017/2018	2018/2019	Difference	
Apr	31	47	16	50.41%
May	45	43	- 2	-3.50%
Jun	41	40	- 1	-1.85%
Jul	43	47	4	9.33%
Aug	53	58	5	9.33%
Sep	42	46	4	9.33%
Oct	45	49	4	9.33%
Nov	47	51	4	9.33%
Dec	28	30	3	9.33%
Jan	48	52	4	9.33%
Feb	35	38	3	9.33%
Mar	41	45	4	9.33%
Total	499	548	49	9.85%

Co-ming	Co-mingled Contamination Tonnes			
	2017/2018	2018/2019	Difference	
Apr	175	154	- 21	-11.91%
May	166	150	- 17	-9.94%
Jun	187	133	- 54	-29.10%
Jul	164	145	- 20	-11.93%
Aug	166	123	- 42	-25.54%
Sep	162	145	- 17	-10.45%
Oct	198	151	- 47	-23.73%
Nov	146	147	0	0.26%
Dec	171	149	- 22	-13.08%
Jan	152	143	- 9	-6.11%
Feb	134	123	- 12	-8.69%
Mar	120	138	19	15.48%
Total	1,943	1,700	- 242	-12.47%

Gree				
	2017/2018	2018/2019	Diffe	rence
Apr	16	23	8	48.59%
May	32	38	6	18.28%
Jun	27	34	7	25.52%
Jul	25	32	6	24.68%
Aug	26	33	7	24.68%
Sep	32	40	8	24.68%
Oct	31	39	8	24.68%
Nov	49	61	12	24.68%
Dec	24	30	6	24.68%
Jan	95	118	23	24.68%
Feb	13	16	3	24.68%
Mar	16	20	4	24.68%
Total	387	484	97	25.17%

1	Wood Waste Tonnes			
	2017/2018	2018/2019	Differ	ence
Apr	-	-	-	0.00%
May	-	-	-	0.00%
Jun	-	-	-	0.00%
Jul	-	-	-	0.00%
Aug	-	-	-	0.00%
Sep	-	-	-	0.00%
Oct	1	1	- 0	-2.00%
Nov	-	-	-	0.00%
Dec	-	-	-	0.00%
Jan	-	-	-	0.00%
Feb	-	-	-	0.00%
Mar	1	1	- 0	-2.00%
Total	1	1	- 0	-2.00%

Lambeth After 3 months of 2018/2019 Printed 9/7/2018 12:03
= Forecast Figures

Tonnage							Budget	Projected	Projected
	2017/2018	2018/2019	2018/2019	Difference	to Budget	2018/2019	2018/2019	2018/2019	2018/2019
	Outturn	Budget	Forecast	Tonnes	Percentage	£/Tonne	Cost £	Cost £	Variance £
Batteries	-	-	-	-		57.50	-	-	-
Clinical Waste	1	1	3	2	219.4%	552.00	552	1,763	1,211
Co-Mingled	19,902	20,142	19,447	- 695	-3.5%	27.00	543,834	525,069	- 18,765
Detritus Waste	610	556	970	414	74.4%	78.50	43,646	76,138	32,492
Electricals	172	125	1	- 124	-99.5%	51.00	6,375	34	- 6,341
Fridges	182	177	136	- 41	-23.2%	48.50	8,585	6,593	- 1,991
Gas Bottles	4	4	1	- 3	-70.2%	130.00	520	155	- 365
General Waste	89,451	89,819	89,381	- 438	-0.5%	147.50	13,248,303	13,183,710	- 64,592
Glass Mixed	-	-	-	-		36.50	-	-	-
Green Waste	298	380	449	69	18.3%	88.00	33,440	39,545	6,105
Inert Waste	-	-	-	-		30.00	-	-	-
Oil & Paint	-	-	-	-		124.50	-	-	-
Paper & Cardboard	484	552	454	- 98	-17.8%	- 13.00	- 7,176	- 5,901	1,275
Scrap Metals	115	120	60	- 60	-49.8%	7.50	900	452	- 448
Textiles & Carpets	-	-	-	-		- 180.00	-	-	-
Tyres	12	11	6	- 5	-49.4%	280.50	3,086	1,562	- 1,523
Wood	245	238	213	- 25	-10.5%	123.00	29,274	26,192	- 3,082
Grand Total	111,477	112,125	111,121	- 1,004	-0.9%	Sub-Total	13,911,338	13,855,312	- 56,026
Contamination	3,276	3,307	2,974	- 334	-10.1%	147.50	487,829	438,594	- 49,235
						Grand Total	14,399,167	14,293,906	- 105,261

F	orecast Tonnes		
	2019/2020	2020/2021	2021/2022
Batteries	-	-	-
Clinical Waste	3	3	3
Co-Mingled	19,524	19,447	19,447
Detritus Waste	974	970	970
Electricals	1	1	1
Fridges	136	136	136
Gas Bottles	1	1	1
General Waste	89,734	89,381	89,381
Glass Mixed	-	-	-
Green Waste	451	449	449
Inert Waste	-	-	-
Oil & Paint	-	-	-
Paper & Cardboard	456	454	454
Scrap Metals	60	60	60
Textiles & Carpets	-	-	-
Tyres	6	6	6
Wood	214	213	213
Grand Total	111,560	111,121	111,121
Contamination	2,985	2,974	2,974

(	Co-Mingled Contaminati	ion			
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Apr	16.5%	13.2%	12.6%	16.5%	15.7%
May	14.7%	14.3%	13.8%	17.7%	12.29
Jun	13.3%	15.0%	14.9%	11.5%	18.2%
Jul	13.7%	12.8%	11.9%	22.4%	15.3%
Aug	19.0%	11.4%	11.9%	18.9%	15.3%
Sep	13.2%	13.8%	13.4%	14.9%	15.3%
Oct	17.8%	11.5%	11.9%	13.1%	15.3%
Nov	20.6%	13.6%	15.3%	15.0%	15.3%
Dec	15.3%	16.8%	12.2%	17.8%	15.3%
Jan	14.7%	15.6%	16.3%	16.2%	15.3%
Feb	16.2%	16.3%	13.2%	15.9%	15.3%
Mar	14.7%	15.5%	18.6%	17.6%	15.3%
Average	15.7%	14.2%	13.9%	16.5%	15.3%
	·			Budget	16.4%

Worl	king Days				
	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Total	254	253	254	253	253
Diff from Year be	Diff from Year before		1	-1	0
Change		-0.39%	0.40%	-0.39%	0.00%

Gener	General Waste Tonnes					
	2017/2018	2018/2019	Diffe	rence		
Apr	6,993	7,420	427	6.10%		
May	7,905	7,998	93	1.18%		
Jun	7,762	7,568	- 194	-2.50%		
Jul	7,773	7,727	- 46	-0.59%		
Aug	7,909	7,862	- 47	-0.59%		
Sep	7,375	7,331	- 44	-0.59%		
Oct	7,893	7,846	- 47	-0.59%		
Nov	7,629	7,584	- 45	-0.59%		
Dec	7,307	7,264	- 43	-0.59%		
Jan	7,575	7,530	- 45	-0.59%		
Feb	6,294	6,257	- 37	-0.59%		
Mar	7,037	6,995	- 42	-0.59%		
Total	89,451	89,381	- 70	-0.08%		

	Co-Mingled Tonnes			
	2017/2018	2018/2019	Differ	ence
Apr	1,495	1,572	76	5.10%
May	1,735	1,742	7	0.40%
Jun	1,752	1,629	- 123	-7.02%
Jul	1,656	1,610	- 46	-2.78%
Aug	1,638	1,592	- 46	-2.78%
Sep	1,609	1,564	- 45	-2.78%
Oct	1,646	1,600	- 46	-2.78%
Nov	1,679	1,632	- 47	-2.78%
Dec	1,722	1,674	- 48	-2.78%
Jan	1,857	1,805	- 52	-2.78%
Feb	1,472	1,431	- 41	-2.78%
Mar	1,643	1,598	- 46	-2.78%
Total	19,902	19,447	- 455	-2.29%

Det	tritus Waste Tonnes			
	2017/2018	2018/2019	Diffe	rence
Apr	36	71	36	99.38%
May	54	86	32	58.77%
Jun	47	63	17	35.81%
Jul	36	57	21	58.35%
Aug	39	62	23	58.35%
Sep	41	65	24	58.35%
Oct	37	59	22	58.35%
Nov	60	95	35	58.35%
Dec	75	119	44	58.35%
Jan	71	113	42	58.35%
Feb	60	94	35	58.35%
Mar	54	86	32	58.35%
Total	610	970	360	59.08%

Co-ming	Co-mingled Contamination Tonnes			
	2017/2018	2018/2019	Difference	
Apr	247	240	- 7	-2.84%
May	307	266	- 41	-13.22%
Jun	201	249	48	23.73%
Jul	372	246	- 125	-33.76%
Aug	309	243	- 66	-21.35%
Sep	240	239	- 1	-0.30%
Oct	216	245	29	13.21%
Nov	252	250	- 3	-1.03%
Dec	307	256	- 51	-16.63%
Jan	300	276	- 24	-8.01%
Feb	234	219	- 16	-6.63%
Mar	290	244	- 45	-15.68%
Total	3,276	2,974	- 302	-9.23%

Gree	n Waste Tonnes			
	2017/2018	2018/2019	Diffe	rence
Apr	-	2	2	0.00%
May	7	7	0	3.80%
Jun	11	18	8	71.43%
Jul	6	9	3	50.48%
Aug	9	14	5	50.48%
Sep	29	44	15	50.48%
Oct	64	96	32	50.48%
Nov	102	153	51	50.48%
Dec	29	43	14	50.48%
Jan	24	37	12	50.48%
Feb	14	22	7	50.48%
Mar	4	5	2	50.48%
Total	298	449	151	50.66%

V	Wood Waste Tonnes			
	2017/2018	2018/2019	Difference	
Apr	30	23	- 6	-21.52%
May	23	27	4	15.34%
Jun	22	16	- 6	-27.07%
Jul	21	18	- 3	-13.54%
Aug	18	16	- 2	-13.54%
Sep	18	16	- 2	-13.54%
Oct	22	19	- 3	-13.54%
Nov	21	18	- 3	-13.54%
Dec	21	18	- 3	-13.54%
Jan	17	15	- 2	-13.54%
Feb	14	12	- 2	-13.54%
Mar	17	15	- 2	-13.54%
Total	245	213	- 32	-13.00%

 Wandsworth
 After
 3
 months of
 2018/2019
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Tonnage							Budget	Projected	Projected
	2017/2018	2018/2019	2018/2019	Difference	to Budget	2018/2019	2018/2019	2018/2019	2018/2019
	Outturn	Budget	Forecast	Tonnes	Percentage	£/Tonne	Cost £	Cost £	Variance £
Batteries	-	-	-	-		57.50	-	-	-
Clinical Waste	65	63	69	6	9.0%	552.00	34,776	37,900	3,124
Co-Mingled	19,900	19,964	20,279	315	1.6%	27.00	539,028	547,539	8,511
Detritus Waste	2,539	2,409	3,430	1,021	42.4%	78.50	189,107	269,238	80,131
Electricals	10	10	5	- 5	-52.7%	51.00	510	241	- 269
Fridges	100	105	93	- 12	-11.9%	48.50	5,093	4,488	- 605
Gas Bottles	2	2	0	- 2	-75.9%	130.00	260	63	- 197
General Waste	77,251	77,371	76,478	- 893	-1.2%	147.50	11,412,223	11,280,545	- 131,678
Glass Mixed	-	-	-	-		36.50	-	-	-
Green Waste	503	572	277	- 295	-51.6%	88.00	50,336	24,376	- 25,960
Inert Waste	23	23	22	- 1	-2.7%	30.00	690	671	- 19
Oil & Paint	-	-	-	-		124.50	-	-	-
Paper & Cardboard	-	-	-	-		- 13.00	-	-	-
Scrap Metals	2	1	2	1	80.3%	7.50	8	14	6
Textiles & Carpets	-	-	-	-		- 180.00	-	-	-
Tyres	1	2	1	- 1	-26.1%	280.50	561	415	- 146
Wood	-	-	-	-		123.00	-	-	-
Grand Total	100,395	100,522	100,656	134	0.1%	Sub-Total	12,232,590	12,165,489	- 67,101
Contamination	2,946	2,959	2,852	- 107	-3.6%	147.50	436,403	420,609	- 15,795
						Grand Total	12,668,993	12,586,098	- 82,895

Fo	recast Tonnes		
l l	2019/2020	2020/2021	2021/2022
Batteries	-	-	-
Clinical Waste	69	69	69
Co-Mingled	20,359	20,279	20,279
Detritus Waste	3,443	3,430	3,430
Electricals	5	5	5
Fridges	93	93	93
Gas Bottles	0	0	0
General Waste	76,781	76,478	76,478
Glass Mixed	-	-	-
Green Waste	278	277	277
Inert Waste	22	22	22
Oil & Paint	-	-	-
Paper & Cardboard	-	-	-
Scrap Metals	2	2	2
Textiles & Carpets	-	-	-
Tyres	1	1	1
Wood	-	-	-
Grand Total	101,054	100,656	100,656
Contamination	2,863	2,852	2,852

C	o-Mingled Contaminati	ion			
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Apr	12.5%	11.2%	13.2%	15.6%	14.19
May	15.9%	10.8%	12.7%	11.9%	12.8
Jun	14.1%	13.6%	17.9%	15.4%	15.5
Jul	9.8%	12.1%	16.4%	16.2%	14.1
Aug	13.7%	14.1%	16.1%	16.8%	14.1
Sep	10.7%	12.5%	14.3%	11.3%	14.1
Oct	18.5%	12.5%	14.3%	15.4%	14.1
Nov	17.1%	12.2%	12.2%	16.0%	14.1
Dec	15.6%	18.0%	13.3%	14.9%	14.1
Jan	14.0%	17.4%	16.3%	14.4%	14.1
Feb	12.6%	17.2%	16.1%	12.2%	14.1
Mar	16.2%	19.0%	13.9%	17.5%	14.1
Average	14.2%	14.3%	14.7%	14.8%	14.1
	·			Budget	14.8%

Working Days					
	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Total	254	253	254	253	253
Diff from Year be	Diff from Year before		1	-1	0
Change		-0.39%	0.40%	-0.39%	0.00%

Gener				
	2017/2018	2018/2019	Diffe	rence
Apr	5,907	6,373	466	7.88%
May	7,006	7,093	87	1.25%
Jun	6,843	6,388	- 455	-6.65%
Jul	6,556	6,457	- 99	-1.51%
Aug	6,630	6,530	- 100	-1.51%
Sep	6,408	6,311	- 97	-1.51%
Oct	6,732	6,630	- 102	-1.51%
Nov	6,577	6,478	- 100	-1.51%
Dec	6,191	6,097	- 94	-1.51%
Jan	6,627	6,527	- 100	-1.51%
Feb	5,521	5,437	- 84	-1.51%
Mar	6,253	6,159	- 95	-1.51%
Total	77,251	76,478	- 773	-1.00%

	Co-Mingled Tonnes			•
	2017/2018	2018/2019	Differ	ence
Apr	1,459	1,587	127	8.72%
May	1,707	1,819	111	6.53%
Jun	1,761	1,694	- 68	-3.86%
Jul	1,646	1,669	23	1.40%
Aug	1,609	1,631	22	1.40%
Sep	1,622	1,644	23	1.40%
Oct	1,628	1,651	23	1.40%
Nov	1,737	1,761	24	1.40%
Dec	1,776	1,801	25	1.40%
Jan	1,937	1,964	27	1.40%
Feb	1,464	1,484	20	1.40%
Mar	1,553	1,575	22	1.40%
Total	19,900	20,279	380	1.91%

Det	Detritus Waste Tonnes			
	2017/2018	2018/2019	Difference	
Apr	170	235	65	38.24%
May	194	273	79	40.99%
Jun	175	231	56	32.20%
Jul	183	246	63	34.52%
Aug	165	222	57	34.52%
Sep	190	256	66	34.52%
Oct	263	354	91	34.52%
Nov	336	452	116	34.52%
Dec	244	328	84	34.52%
Jan	242	326	84	34.52%
Feb	167	225	58	34.52%
Mar	209	281	72	34.52%
Total	2,539	3,430	891	35.10%

Co-ming	Co-mingled Contamination Tonnes			
	2017/2018	2018/2019	Difference	
Apr	227	223	- 4	-1.75%
May	203	256	52	25.77%
Jun	272	238	- 34	-12.44%
Jul	267	235	- 32	-12.10%
Aug	270	229	- 40	-14.93%
Sep	183	231	48	26.29%
Oct	251	232	- 19	-7.54%
Nov	277	248	- 30	-10.72%
Dec	264	253	- 11	-4.18%
Jan	280	276	- 4	-1.26%
Feb	179	209	30	16.58%
Mar	272	221	- 51	-18.62%
Total	2,946	2,852	- 94	-3.19%

Gree	n Waste Tonnes				
	2017/2018	2018/2019	Difference		
Apr	14	15	1	7.95%	
May	32	14	- 19	-57.72%	
Jun	26	12	- 14	-55.11%	
Jul	22	12	- 10	-45.06%	
Aug	19	10	- 8	-45.06%	
Sep	23	13	- 10	-45.06%	
Oct	26	14	- 12	-45.06%	
Nov	40	22	- 18	-45.06%	
Dec	62	34	- 28	-45.06%	
Jan	205	112	- 92	-45.06%	
Feb	23	13	- 10	-45.06%	
Mar	12	6	- 5	-45.06%	
Total	503	277	- 226	-44.90%	

	Wood Waste Tonnes			
	2017/2018	2018/2019	Difference	
Apr	-	-	-	0.00%
May	-	-	-	0.00%
Jun	-	-	-	0.00%
Jul	-	-	-	0.00%
Aug	-	-	-	0.00%
Sep	-	-	-	0.00%
Oct	-	-	-	0.00%
Nov	-	-	-	0.00%
Dec	-	-	-	0.00%
Jan	-	-	-	0.00%
Feb	-	-	-	0.00%
Mar	-	-	-	0.00%
Total	-	-	-	0.00%

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Household Waste & Recycling Cenrte & Charity

= Forecast Figures

After 3 months of 2018/2019

Printed

Tonnage						Budget	Projected	Projected	
	2017/2018	2018/2019	2018/2019	Difference	to Budget	2018/2019	2018/2019	2018/2019	2018/2019
	Outturn	Budget	Forecast	Tonnes	Percentage	£/Tonne	Cost £	Cost £	Variance £
Batteries	22	26	-	- 26	-100%	57.50	1,495	-	- 1,495
Clinical Waste	-	-	-	-		552.00	-	-	-
Co-Mingled	437	393	702	309	78.6%	27.00	10,611	18,950	8,339
Detritus Waste	-	-	-	-		78.50	-	-	-
Electricals	738	729	575	- 154	-21.1%	51.00	37,179	29,333	- 7,846
Fridges	65	75	56	- 19	-25.3%	48.50	3,638	2,718	- 919
Gas Bottles	19	19	-	- 19	-100.0%	130.00	2,470	-	- 2,470
General Waste	10,749	11,267	9,359	- 1,908	-16.9%	147.50	1,661,883	1,380,482	- 281,400
Glass Mixed	-	-	-	-		36.50	-	-	-
Green Waste	3,065	3,209	3,228	19	0.6%	88.00	282,392	284,050	1,658
Inert Waste	1,212	1,075	1,436	361	33.6%	30.00	32,250	43,079	10,829
Oil & Paint	15	16	23	7	41.7%	124.50	1,992	2,823	831
Paper & Cardboard	827	886	618	- 268	-30.3%	- 13.00	- 11,518	- 8,028	3,490
Scrap Metals	687	707	695	- 12	-1.7%	7.50	5,303	5,214	- 88
Textiles & Carpets	205	200	347	147	73.5%	- 180.00	- 36,000	- 62,461	- 26,461
Tyres	-	-	0	0		280.50	-	17	17
Wood	3,165	3,231	3,032	- 199	-6.2%	123.00	397,413	372,962	- 24,451
Grand Total	21,208	21,833	20,071	- 1,762	-8.1%	Sub-Total	2,389,107	2,069,139	- 319,968
Contamination	64	58	95	37	64.0%	147.50	8,573	14,064	5,490
	Grand Total					2,397,680	2,083,202	- 314,478	

Fo	recast Tonnes		
	2019/2020	2020/2021	2021/2022
Batteries	-	-	-
Clinical Waste	-	-	-
Co-Mingled	705	702	702
Detritus Waste	-	-	-
Electricals	577	575	575
Fridges	56	56	56
Gas Bottles	-	-	-
General Waste	9,396	9,359	9,359
Glass Mixed	-	-	-
Green Waste	3,241	3,228	3,228
Inert Waste	1,442	1,436	1,436
Oil & Paint	23	23	23
Paper & Cardboard	620	618	618
Scrap Metals	698	695	695
Textiles & Carpets	348	347	347
Tyres	0	0	0
Wood	3,044	3,032	3,032
Grand Total	20,150	20,071	20,071
Contamination	96	95	95

С	o-Mingled Contamination	on			•
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Apr	14.8%	12.6%	12.6%	15.0%	14.0%
May	15.6%	13.8%	12.6%	14.3%	12.29
Jun	14.7%	13.2%	14.8%	13.2%	14.3%
Jul	12.8%	13.3%	12.9%	16.6%	13.6%
Aug	16.2%	12.7%	13.2%	16.9%	13.6%
Sep	13.1%	13.8%	13.5%	12.5%	13.6%
Oct	17.0%	13.1%	12.9%	14.3%	13.6%
Nov	17.5%	13.2%	13.7%	14.0%	13.6%
Dec	15.3%	16.5%	13.4%	15.4%	13.6%
Jan	15.2%	16.1%	15.1%	14.5%	13.6%
Feb	14.0%	16.1%	14.3%	13.4%	13.6%
Mar	14.9%	16.0%	14.8%	14.6%	13.69
Average	15.0%	14.2%	13.6%	14.6%	13.69
				Budget	14.8%

Worl	cing Days				
	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Total	254	253	254	253	253
Diff from Year before		-1	1	-1	0
Change		-0.39%	0.40%	-0.39%	0.00%

General Waste Tonnes				
	2017/2018	2018/2019	Diffe	rence
Apr	1,196	975	- 221	-18.45%
May	1,141	1,029	- 112	-9.85%
Jun	1,007	948	- 59	-5.83%
Jul	1,100	952	- 148	-13.48%
Aug	1,078	932	- 145	-13.48%
Sep	913	790	- 123	-13.48%
Oct	865	748	- 117	-13.48%
Nov	706	610	- 95	-13.48%
Dec	728	630	- 98	-13.48%
Jan	698	604	- 94	-13.48%
Feb	638	552	- 86	-13.48%
Mar	681	589	- 92	-13.48%
Total	10,749	9,359	- 1,390	-12.93%

	Co-Mingled Tonnes			·
	2017/2018	2018/2019	Differ	ence
Apr	30	46	17	56.76%
May	29	39	9	31.42%
Jun	23	49	26	111.07%
Jul	33	52	19	59.85%
Aug	32	52	19	59.85%
Sep	30	49	18	59.85%
Oct	34	54	20	59.85%
Nov	41	66	25	59.85%
Dec	57	92	34	59.85%
Jan	38	61	23	59.85%
Feb	52	84	31	59.85%
Mar	37	59	22	59.85%
Total	437	702	264	60.46%

De	tritus Waste Tonnes			
	2017/2018	2018/2019	Diffe	rence
Apr	-	-	-	0.00%
May	-	-	-	0.00%
Jun	-	-	-	0.00%
Jul	-	-	-	0.00%
Aug	-	-	-	0.00%
Sep	-	-	-	0.00%
Oct	-	-	-	0.00%
Nov	-	-	-	0.00%
Dec	-	-	-	0.00%
Jan	-	-	-	0.00%
Feb	-	-	-	0.00%
Mar	-	-	-	0.00%
Total	-	-	-	0.00%

Co-ming	gled Contamination To	onnes		
	2017/2018	2018/2019	Difference	
Apr	4	6	2	46.36%
May	4	5	1	12.20%
Jun	3	7	4	129.13%
Jul	5	7	2	31.02%
Aug	5	7	2	28.17%
Sep	4	7	3	73.35%
Oct	5	7	2	51.42%
Nov	6	9	3	55.06%
Dec	9	12	4	40.60%
Jan	6	8	3	49.32%
Feb	7	11	4	61.45%
Mar	5	8	3	48.77%
Total	64	95	32	49.36%

Green Waste Tonnes				
	2017/2018	2018/2019	Difference	
Apr	385	309	- 76	-19.75%
May	407	497	90	21.97%
Jun	366	429	63	17.34%
Jul	311	325	14	4.50%
Aug	359	375	16	4.50%
Sep	281	293	13	4.50%
Oct	284	296	13	4.50%
Nov	198	207	9	4.50%
Dec	118	124	5	4.50%
Jan	116	121	5	4.50%
Feb	112	117	5	4.50%
Mar	129	135	6	4.50%
Total	3,065	3,228	163	5.31%

1	<b>Wood Waste Tonnes</b>			
	2017/2018	2018/2019	Differ	ence
Apr	348	304	- 44	-12.71%
May	300	312	12	4.04%
Jun	290	295	6	1.95%
Jul	306	292	- 15	-4.77%
Aug	280	267	- 13	-4.77%
Sep	252	240	- 12	-4.77%
Oct	270	257	- 13	-4.77%
Nov	223	213	- 11	-4.77%
Dec	209	199	- 10	-4.77%
Jan	228	217	- 11	-4.77%
Feb	220	210	- 11	-4.77%
Mar	238	227	- 11	-4.77%
Total	3,165	3,032	- 133	-4.19%

Western Riverside Waste Authority = Forecast Figures

3 months of 2018/2019

Printed 9/7/2018 12:03

Tonnage							Budget	Projected	Projected
	2017/2018	2018/2019	2018/2019	Difference	to Budget	2018/2019	2018/2019	2018/2019	2018/2019
	Outturn	Budget	Forecast	Tonnes	Percentage	£/Tonne	Cost £	Cost £	Variance £
Batteries	23	27	-	- 27	-100%	57.50	1,553	-	- 1,553
Clinical Waste	95	93	95	2	2.3%	552.00	51,336	52,531	1,195
Co-Mingled	67,433	67,738	67,129	- 609	-0.9%	27.00	1,828,926	1,812,485	- 16,441
Detritus Waste	4,381	4,134	5,753	1,619	39.2%	78.50	324,519	451,605	127,086
Electricals	962	906	637	- 269	-29.7%	51.00	46,206	32,468	- 13,738
Fridges	502	527	427	- 100	-19.0%	48.50	25,560	20,701	- 4,859
Gas Bottles	28	28	3	- 25	-89.2%	130.00	3,640	395	- 3,245
General Waste	295,659	297,183	292,020	- 5,163	-1.7%	147.50	43,834,493	43,073,009	- 761,484
Glass Mixed	-	-	-	-		36.50	-	-	-
Green Waste	4,368	4,791	4,568	- 223	-4.7%	88.00	421,608	401,980	- 19,628
Inert Waste	1,235	1,098	1,458	360	32.8%	30.00	32,940	43,750	10,810
Oil & Paint	15	16	23	7	41.7%	124.50	1,992	2,823	831
Paper & Cardboard	1,311	1,438	1,071	- 367	-25.5%	- 13.00	- 18,694	- 13,929	4,765
Scrap Metals	818	845	761	- 84	-9.9%	7.50	6,338	5,709	- 628
Textiles & Carpets	205	200	347	147	73.5%	- 180.00	- 36,000	- 62,461	- 26,461
Tyres	13	13	7	- 6	-42.7%	280.50	3,647	2,088	- 1,558
Wood	3,411	3,470	3,246	- 224	-6.4%	123.00	426,810	399,281	- 27,529
Grand Total	380,462	382,507	377,546	- 4,961	-1.3%	Sub-Total	46,954,872	46,222,436	- 732,436
Contamination	9,821	9,946	9,041	- 905	-9.1%	147.50	1,467,017	1,333,509	- 133,507
						Grand Total	48,421,888	47,555,945	- 865,943

F	orecast Tonnes		
	2019/2020	2020/2021	2021/2022
Batteries	-		-
Clinical Waste	96	95	95
Co-Mingled	67,394	67,129	67,129
Detritus Waste	5,776	5,753	5,753
Electricals	639	637	637
Fridges	429	427	427
Gas Bottles	3	3	3
General Waste	293,175	292,020	292,020
Glass Mixed	-	-	-
Green Waste	4,586	4,568	4,568
Inert Waste	1,464	1,458	1,458
Oil & Paint	23	23	23
Paper & Cardboard	1,076	1,071	1,071
Scrap Metals	764	761	761
Textiles & Carpets	348	347	347
Tyres	7	7	7
Wood	3,259	3,246	3,246
Grand Total	379,039	377,546	377,546
Contamination	9,076	9,041	9,041

	Co-Mingled Contaminat	ion		_	
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Apr	14.8%	12.6%	12.6%	15.0%	14.0%
May	15.6%	13.8%	12.6%	14.3%	12.2%
Jun	14.7%	13.2%	14.8%	13.2%	14.3%
Jul	12.8%	13.3%	12.9%	16.6%	13.6%
Aug	16.2%	12.7%	13.2%	16.9%	13.6%
Sep	13.1%	13.8%	13.5%	12.5%	13.6%
Oct	17.0%	13.1%	12.9%	14.3%	13.6%
Nov	17.5%	13.2%	13.7%	14.0%	13.6%
Dec	15.3%	16.5%	13.4%	15.4%	13.6%
Jan	15.2%	16.1%	15.1%	14.5%	13.6%
Feb	14.0%	16.1%	14.3%	13.4%	13.6%
Mar	14.9%	16.0%	14.8%	14.6%	13.6%
Average	15.0%	14.2%	13.6%	14.6%	13.6%
				Budget	14.8%

Worl	king Days				
	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Total	254	253	254	253	253
Diff from Year be	fore	-1	1	-1	0
Change		-0.39%	0.40%	-0.39%	0.00%

Gener				
	2017/2018	2018/2019	Diffe	rence
Apr	23,094	24,372	1,277	5.53%
May	26,527	26,665	137	0.52%
Jun	26,148	24,855	- 1,292	-4.94%
Jul	25,637	25,169	- 468	-1.82%
Aug	25,526	25,065	- 461	-1.81%
Sep	24,570	24,139	- 432	-1.76%
Oct	25,979	25,536	- 443	-1.70%
Nov	25,274	24,858	- 416	-1.64%
Dec	23,938	23,538	- 400	-1.67%
Jan	24,742	24,335	- 406	-1.64%
Feb	20,718	20,372	- 346	-1.67%
Mar	23,507	23,117	- 390	-1.66%
Total	295,660	292,020	- 3,639	-1.23%

Total	295,660	292,020	- 3,639	-1.23%
			T	
De	tritus Waste Tonnes			
	2017/2018	2018/2019	Diffe	rence
Apr	283	420	137	48.44%
May	351	470	119	33.94%
Jun	326	388	62	18.86%
Jul	337	432	95	28.27%
Aug	320	411	91	28.31%
Sep	337	437	100	29.52%
Oct	400	522	122	30.46%
Nov	511	672	162	31.67%
Dec	406	542	136	33.54%
Jan	433	570	136	31.48%
Feb	316	417	101	31.90%

474 5,753 113

1,373

31.25%

31.33%

Gree	n Waste Tonnes			
	2017/2018	2018/2019	Diffe	rence
Apr	415	358	- 56	-13.56%
May	479	562	83	17.37%
Jun	429	493	65	15.08%
Jul	364	377	13	3.71%
Aug	414	433	19	4.57%
Sep	367	392	25	6.75%
Oct	407	448	41	10.03%
Nov	397	451	54	13.60%
Dec	234	232	- 2	-0.90%
Jan	530	477	- 53	-10.02%
Feb	166	171	5	3.13%
Mar	169	175	6	3.72%
Total	4,368	4,568	200	4.57%

361 **4,380** 

Mar Total

	Co-Mingled Tonnes			
	2017/2018	2018/2019	Differ	ence
Apr	5,030	5,371	341	6.79%
May	5,890	5,976	85	1.45%
Jun	5,922	5,656	- 266	-4.49%
Jul	5,624	5,567	- 57	-1.01%
Aug	5,314	5,263	- 51	-0.96%
Sep	5,561	5,504	- 57	-1.03%
Oct	5,696	5,637	- 58	-1.02%
Nov	5,812	5,759	- 52	-0.90%
Dec	5,950	5,906	- 44	-0.74%
Jan	6,164	6,109	- 56	-0.90%
Feb	4,950	4,915	- 35	-0.70%
Mar	5,522	5,467	- 55	-0.99%
Total	67,433	67,129	- 304	-0.45%

Co-mi	ngled Contamination To	onnes		
	2017/2018	2018/2019	Differ	ence
Apr	753	750	- 2	-0.30%
May	841	728	- 113	-13.39%
Jun	781	810	29	3.68%
Jul	932	749	- 183	-19.66%
Aug	900	713	- 188	-20.84%
Sep	697	739	43	6.11%
Oct	817	756	- 61	-7.41%
Nov	814	775	- 39	-4.79%
Dec	919	795	- 124	-13.48%
Jan	896	827	- 69	-7.74%
Feb	666	663	- 3	-0.45%
Mar	806	736	- 70	-8.72%
Total	9,821	9,041	- 781	-7.95%

V	<b>Vood Waste Tonnes</b>				
	2017/2018	2018/2019	Differ	ence	
Apr	378	327	- 51	-13.40%	
May	323	339	16	4.85%	
Jun	312	312	- 0	-0.10%	
Jul	327	310	- 17	-5.33%	
Aug	299	283	- 16	-5.31%	
Sep	270	256	- 14	-5.36%	
Oct	292	276	- 16	-5.42%	
Nov	244	231	- 13	-5.52%	
Dec	230	218	- 13	-5.57%	
Jan	245	232	- 13	-5.37%	
Feb	235	222	- 12	-5.30%	
Mar	256	242	- 14	-5.34%	
Total	3,411	3,246	- 164	-4.82%	

After	3	months of	2018/2019
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After	3	months of	2018/2019									
General V	Vaste Delivered	(Tonnes)					Ann	ual		2018/2019	Buc	dget
ocnerar v	vaste Benvered	(Tomics)			TO DATE	FORECAST	Change	Change		Budget	Change	Change
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent		Tonnes	Tonnes	Percent
HF	61,279	61,562	60,602	58,478	14,995	57,503		-1.67%		58,842		-2.289
KC	60,789			59,730		59,299		-0.72%		59,884	,	-0.989
		61,110	60,292		15,105							
LA	94,025	93,483	92,784	89,451	22,986	89,381		-0.08%		89,819		-0.499
WA	77,825	79,542	79,034	77,251	19,853	76,478		-1.00%		77,371		-1.159
WRWA	12,908	12,355	11,792	10,749	2,952	9,359		-12.93%		11,267		-16.939
Total	306,826	308,051	304,504	295,660	75,892	292,020	- 3,639	-1.23%		297,183	- 5,163	-1.749
Change		1,224	- 3,547	- 8,844		- 3,639						
Percentag	ge Change	0.40%	-1.15%	-2.90%		-1.23%						
Co-Mingle	ed Waste Delive	ered (Tonnes)					Ann	ual		2018/2019	Buc	dget
ŭ		• •			TO DATE	FORECAST	Change	Change		Budget	Change	Change
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent		Tonnes	Tonnes	Percent
HF	11,811	11,463	11,520	11,305	2,832	11,129		-1.56%		11,279		-1.339
KC												-2.439
	16,997	16,711	16,307	15,889	3,996	15,572		-2.00%		15,960		
LA MA	18,759	18,379	18,388	19,902	4,942	19,447		-2.29%		20,142		-3.459
WA	19,583	19,699	20,180	19,900	5,099	20,279	380	1.91%		19,964	315	1.589
WRWA	442	379	339	437	134	702	264	60.46%		393	309	78.599
Total	67,593	66,630	66,733	67,433	17,003	67,129	- 304	-0.45%		67,738	- 609	-0.90%
Change		- 962	103	700		- 304						
Percentag	ge Change	-1.42%	0.15%	1.05%		-0.45%						
Co-Mingle	ed Contaminati	on (Percentage	.1				Change in					
co mingi	cu contaminati	on (i crecinage	-,		TO DATE	FORECAST	Percentage					
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Point					
	-	-	-	-	•	-						
HF	15.84%	14.41%	14.02%	14.09%	12.76%	12.76%	-1.34%					
KC	14.76%	14.10%	11.86%	12.23%	10.92%	10.92%	-1.31%					
LA	15.75%	14.17%	13.90%	16.46%	15.29%	15.29%	-1.17%					
WA	14.24%	14.29%	14.73%	14.80%	14.06%	14.06%	-0.74%					
WRWA	15.02%	14.24%	13.64%	14.59%	13.59%	13.59%	-1.01%					
Co-Mingl	led Contaminat	ion (Tonnes)					Ann	ual	2017/2018	2018/2019	Bud	dget
					TO DATE	FORECAST	Change	Change	Budget	Budget	Change	Change
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent	Percentage	_	Tonnes	Percent
HF	1,871	1,652	1,616	1,593	361	1,420		-10.89%	14.1%			-10.979
KC	2,510	2,357	1,934	1,943	436	1,700		-12.47%	12.7%			-16.119
LA	2,954	2,604	2,556	3,276	756	2,974		-9.23%	16.4%			-10.099
WA	2,788	2,816	2,550	2,946	717	2,852		-3.19%	14.8%			-3.629
WRWA				2,946								
	66	54	46		18	95	32	49.36%	14.8%		37	64.049
Total	10,189	9,482	9,124	9,821	2,289	9,041	- 781	-7.95%	14.7%	9,946	- 905	-9.10%
Change		- 707		697		- 781						
Percentag	ge Change	-6.93%	-3.78%	7.64%		-7.95%						
Green Wa	aste Delivered (	Tonnes)					Ann	ual		2018/2019	Bud	dget
					TO DATE	FORECAST	Change	Change		Budget	Change	Change
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent		Tonnes	Tonnes	Percent
HF	97	75	114	115	17	130	14	12.46%		207		-37.35%
	634	494	359	387	95	484	97	25.17%		423	61	14.439
KC	638	323	241	298	27	449	151	50.66%		380	69	18.269
			552	503	40	277				572		
LA				503	40	211	- 226	-44.90%				-51.579
LA WA	506	483			4 225	2 220	4.00					
LA WA WRWA	506 2,908	2,749	3,217	3,065	1,235	3,228	163	5.31%		3,209	19	
LA WA WRWA Total	506	2,749 4,124	3,217 4,483	3,065 4,368	1,235 1,413	4,568	163 200	5.31% 4.57%		3,209 4,791		
KC LA WA WRWA Total Change	506 2,908	2,749	3,217	3,065 4,368								0.59% -4.66%

Clinical W	aste Delivered (	Tonnes)					Ann		2018/2019	Bud	-
	2014/2015	2015/2016	2016/2017	2017/2018	TO DATE 2018/2019	FORECAST 2018/2019	Change Tonnes	Change Percent	Budget Tonnes	Change Tonnes	Change Percent
HF	39	34	30	2017/2018	6	2018/2019	5	-19.39%	27		-18.25%
KC .	2	4	3	2	0	1 -	1	-43.64%		- 1	-38.00%
LA	2	2	2	1	1	3	2	124.90%	1	2	219.36%
WA	53	58	60	65	17	69	4	6.22%	63	6	8.98%
WRWA	-	-	-	-	-	-	- "	0.00%	-	-	0.00%
Total	96	98	95	96	24	95 -	0	-0.50%	93	2	2.33%
Change	30	1		1	24	- 0	U	0.5070	55	2	2.337
Change Percentag	e Change	1.52%	-2.74%	0.57%		-0.50%					
Detritus W	/aste Delivered	(Tonnes)					Ann	ual	2018/2019	Bud	lget
		_			TO DATE	FORECAST	Change	Change	Budget	Change	Change
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent	Tonnes	Tonnes	Percent
HF	576	951	813	733	188	805	72	9.83%	695	110	15.90%
KC	624	650	536	499	130	548	49	9.85%	474	74	15.56%
LA	593	678	587	610	220	970	360	59.08%	556	414	74.44%
WA	2,683	2,609	2,482	2,539	739	3,430	891	35.10%	2,409	1,021	42.379
WRWA	-	-	-	-	-	-	-	0.00%	-	-	0.009
Total	4,476	4,888	4,418	4,380	1,277	5,753	1,373	31.33%	4,134	1,619	39.16%
Change		413	- 470	- 38		1,373					
Percentag	e Change	9.22%	-9.62%	-0.85%		31.33%					
											_
Battery W	aste Delivered	(Tonnes)					Ann		2018/2019	Bud	
		_			TO DATE	FORECAST	Change	Change	Budget	Change	Change
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent	Tonnes	Tonnes	Percent
HF	1	2	1	1	-		1	-100.00%	1	- 1	-100.00%
KC	-	-	-	-	-	-	-	0.00%	-	-	0.00%
LA	-	-	-	-	-	-		0.00%	-	-	0.00%
WA	-	-	0	-	-	-		0.00%	-	-	0.00%
WRWA	23	28	25	22	-		22	-100.00%	26	- 26	-100.00%
Total	23	30	25	23	-		23	-100.00%	27	- 27	-100.00%
Change		7	- 5	- 2		- 23					
Percentag	e Change	29.09%	-15.60%	-9.16%		-100.00%					
Fl4-:13	Wasta Ballinasa	d (Tanana)						1	2010/2010	D	14
Electrical	Waste Delivered				TO DATE		Ann		2018/2019	Duo	lget Change
		<u>a (Tonnes)</u>				EODECAST	Change		Dudge+	Change	Cilalige
	2014/2015		2016/2017	2017/2019	TO DATE	FORECAST	Change	Change	Budget	Change	-
ue.	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent	Tonnes	Tonnes	Percent
	26	<b>2015/2016</b> 45	44	15	<b>2018/2019</b> 2	<b>2018/2019</b> 4 -	Tonnes	Percent -75.59%	Tonnes 17	Tonnes	-78.06%
KC	26 10	<b>2015/2016</b> 45 37	44 49	15 27	2018/2019 2 11	<b>2018/2019</b> 4 - 52	Tonnes 12 25	Percent -75.59% 91.03%	Tonnes 17 25	Tonnes - 13 27	Percent -78.06% 109.37%
KC LA	26 10 200	2015/2016 45 37 196	44 49 194	15 27 172	2018/2019 2 11 0	2018/2019 4 - 52 1 -	Tonnes  12 25 172	Percent -75.59% 91.03% -99.61%	Tonnes 17 25 125	Tonnes - 13 27 - 124	-78.06% 109.37% -99.46%
KC LA WA	26 10 200 1	2015/2016 45 37 196 3	44 49 194 3	15 27 172 10	2018/2019 2 11 0 1	2018/2019 4 - 52 1 - 5 -	Tonnes  12 25 172 6	Percent -75.59% 91.03% -99.61% -54.56%	Tonnes 17 25 125 10	Tonnes - 13 27 - 124 - 5	Percent -78.06% 109.37% -99.46% -52.65%
KC LA WA WRWA	26 10 200 1 834	2015/2016 45 37 196 3 858	44 49 194 3 806	15 27 172 10 738	2018/2019 2 11 0 1 158	2018/2019 4 - 52 1 - 5 - 575 -	Tonnes  12 25 172 6 163	Percent -75.59% 91.03% -99.61% -54.56% -22.09%	Tonnes 17 25 125 10 729	Tonnes - 13 - 27 - 124 - 5 - 154	Percent -78.06% 109.37% -99.46% -52.65% -21.10%
KC LA WA WRWA Total	26 10 200 1	2015/2016 45 37 196 3 858 1,139	44 49 194 3 806 1,095	15 27 172 10 738 964	2018/2019 2 11 0 1	2018/2019 4 - 52 1 - 5 - 575 - 637 -	Tonnes  12 25 172 6	Percent -75.59% 91.03% -99.61% -54.56%	Tonnes 17 25 125 10	Tonnes - 13 - 27 - 124 - 5 - 154	Percent -78.06% 109.37% -99.46% -52.65% -21.10%
KC LA WA WRWA Total Change	26 10 200 1 834 1,071	2015/2016 45 37 196 3 858 1,139 67	44 49 194 3 806 1,095	15 27 172 10 738 964	2018/2019 2 11 0 1 158	2018/2019 4 - 52 1 - 5 - 575 - 637 - 327	Tonnes  12 25 172 6 163	Percent -75.59% 91.03% -99.61% -54.56% -22.09%	Tonnes 17 25 125 10 729	Tonnes - 13 - 27 - 124 - 5 - 154	Percent -78.06% 109.37% -99.46% -52.65% -21.10%
HF KC LA WA WRWA Total Change Percentag	26 10 200 1 834 1,071	2015/2016 45 37 196 3 858 1,139	44 49 194 3 806 1,095	15 27 172 10 738 964	2018/2019 2 11 0 1 158	2018/2019 4 - 52 1 - 5 - 575 - 637 -	Tonnes  12 25 172 6 163	Percent -75.59% 91.03% -99.61% -54.56% -22.09%	Tonnes 17 25 125 10 729	Tonnes - 13 - 27 - 124 - 5 - 154	Percent -78.06% 109.37% -99.46% -52.65% -21.10%
KC LA WA WRWA Total Change Percentag	26 10 200 1 834 1,071	2015/2016 45 37 196 3 858 1,139 67 6.30%	44 49 194 3 806 1,095	15 27 172 10 738 964	2018/2019 2 11 0 1 158 172	2018/2019 4 - 52 1 - 5 - 575 - 637 - 327	Tonnes  12 25 172 6 163	Percent -75.59% 91.03% -99.61% -54.56% -22.09% -33.94%	Tonnes 17 25 125 10 729	Tonnes - 13 27 - 124 - 5 - 154 - 269	Percent -78.06% 109.37% -99.46% -52.65% -21.10% -29.73%
KC LA WA WRWA Total Change Percentag	26 10 200 1 834 1,071 e Change	2015/2016 45 37 196 3 858 1,139 67 6.30%	44 49 194 3 806 1,095 - 44 -3.89%	15 27 172 10 738 964 - 131 -11.96%	2018/2019 2 11 0 1 158 172 TO DATE	2018/2019 4 - 52 1 - 5 - 575 - 637 - 327 -33.94%	Tonnes  12 25 172 6 163 327  Ann Change	Percent -75.59% 91.03% -99.61% -54.56% -22.09% -33.94%  ual Change	Tonnes  17 25 125 10 729 906  2018/2019 Budget	Tonnes - 13 - 27 - 124 - 5 - 154 - 269  Bud Change	Percent -78.06% 109.37% -99.46% -52.65% -21.10% -29.73%
KC LA WA WRWA Total Change Percentag Fridge Wa	26 10 200 1 834 1,071 e Change ste Delivered (T	2015/2016 45 37 196 3 858 1,139 67 6.30%	44 49 194 3 806 1,095 - 44 -3.89%	15 27 172 10 738 964 - 131 -11.96%	2018/2019 2 11 0 1 158 172 TO DATE 2018/2019	2018/2019  4 - 52 1 - 5 - 575 - 637 - 327 -33.94%  FORECAST 2018/2019	Tonnes  12 25 172 6 163 327  Ann Change Tonnes	Percent -75.59% 91.03% -99.61% -54.56% -22.09% -33.94%  ual Change Percent	Tonnes  17 25 125 10 729 906  2018/2019 Budget Tonnes	Tonnes - 13 - 27 - 124 - 5 - 154 - 269  Bud Change Tonnes	Percent -78.069 109.379 -99.469 -52.659 -21.109 -29.739
KC LA WA WRWA Total Change Percentag Fridge Wa	26 10 200 1 834 1,071 e Change ste Delivered (1 2014/2015 80	2015/2016 45 37 196 3 858 1,139 67 6.30%	44 49 194 3 806 1,095 - 44 -3.89%	15 27 172 10 738 964 - 131 -11.96%	2018/2019 2 11 0 1 158 172 TO DATE	2018/2019 4 - 52 1 - 5 - 575 - 637 - 327 -33.94%  FORECAST 2018/2019 86 -	Tonnes  12 25 172 6 163 327  Ann Change Tonnes 9	Percent -75.59% 91.03% -99.61% -54.56% -22.09% -33.94%  ual Change Percent -9.17%	Tonnes  17  25  125  10  729  906  2018/2019  Budget  Tonnes  101	Tonnes - 13 - 27 - 124 - 5 - 154 - 269  Bud Change Tonnes - 15	Percent -78.069 109.379 -99.469 -52.659 -21.109 -29.739  iget Change Percent -15.159
KC LA WA WRWA Total Change Percentag Fridge Wa	26 10 200 1 834 1,071 e Change ste Delivered (T	2015/2016 45 37 196 3 858 1,139 67 6.30%	44 49 194 3 806 1,095 - 44 -3.89%	15 27 172 10 738 964 - 131 -11.96%	2018/2019 2 11 0 1 158 172 TO DATE 2018/2019	2018/2019  4 - 52 1 - 5 - 575 - 637 - 327 -33.94%  FORECAST 2018/2019	Tonnes  12 25 172 6 163 327  Ann Change Tonnes 9	Percent -75.59% 91.03% -99.61% -54.56% -22.09% -33.94%  ual Change Percent	Tonnes  17 25 125 10 729 906  2018/2019 Budget Tonnes	Tonnes - 13 - 27 - 124 - 5 - 154 - 269  Bud Change Tonnes - 15	Percent -78.069 109.379 -99.469 -52.659 -21.109 -29.739  iget Change Percent -15.159
KC LA WA WRWA Total Change Percentag Fridge Wa HF	26 10 200 1 834 1,071 e Change ste Delivered (1 2014/2015 80	2015/2016 45 37 196 3 858 1,139 67 6.30%	44 49 194 3 806 1,095 - 44 -3.89%	15 27 172 10 738 964 - 131 -11.96%	2018/2019 2 11 0 1 158 172 TO DATE 2018/2019 22	2018/2019 4 - 52 1 - 5 - 575 - 637 - 327 -33.94%  FORECAST 2018/2019 86 -	Tonnes  12 25 172 6 163 327  Ann Change Tonnes 9 4	Percent -75.59% 91.03% -99.61% -54.56% -22.09% -33.94%  ual Change Percent -9.17%	Tonnes  17  25  125  10  729  906  2018/2019  Budget  Tonnes  101	Tonnes - 13 - 27 - 124 - 5 - 154 - 269  Bud Change Tonnes - 15 - 12	Percent -78.069 109.379 -99.469 -52.659 -21.109 -29.739  diget Change Percent -15.159 -17.999
KC LA WA WRWA Total Change Percentag Fridge Wa HF KC LA	26 10 200 1 834 1,071 e Change ste Delivered (1 2014/2015 80 51	2015/2016 45 37 196 3 858 1,139 67 6.30% 2015/2016 93 60	44 49 194 3 806 1,095 - 44 -3.89% 2016/2017 101 64	15 27 172 10 738 964 - 131 -11.96% 2017/2018 94 61	2018/2019 2 11 0 1 158 172 TO DATE 2018/2019 22 16	2018/2019 4 - 52 1 - 5 - 575 - 637 - 327 - 33.94%  FORECAST 2018/2019 86 - 57 -	Tonnes  12 25 172 6 163 327  Ann Change Tonnes 9 4 46	Percent -75.59% 91.03% -99.61% -54.56% -22.09% -33.94%  ual Change Percent -9.17% -6.93%	Tonnes  17  25  125  10  729  906   2018/2019  Budget  Tonnes  101  69	Tonnes - 13 27 - 124 - 5 - 154 - 269  Bud Change Tonnes - 15 - 12 - 41	Percent -78.069 109.379 -99.469 -52.659 -21.109 -29.739  iget Change Percent -15.159 -17.999 -23.209
KC LA WA WRWA Total Change Percentag Fridge Wa HF KC LA WA	26 10 200 1 834 1,071 e Change ste Delivered (1 2014/2015 80 51 193	2015/2016 45 37 196 3 858 1,139 67 6.30% 2015/2016 93 60 207	44 49 194 3 806 1,095 - 44 -3.89% 2016/2017 101 64 212	15 27 172 10 738 964 - 131 -11.96% 2017/2018 94 61 182	2018/2019 2 11 0 1 158 172 TO DATE 2018/2019 22 16 36	2018/2019 4 - 52 1 - 5 - 575 - 637 - 327 - 33.94%  FORECAST 2018/2019 86 - 57 - 136 -	Tonnes  12 25 172 6 163 327  Ann Change Tonnes 9 4 46 8	Percent -75.59% 91.03% -99.61% -54.56% -22.09% -33.94%  ual Change Percent -9.17% -6.93% -25.49%	Tonnes  17  25  125  10  729  906  2018/2019  Budget  Tonnes  101  69  177	Tonnes - 13 - 27 - 124 - 5 - 154 - 269  Bud Change Tonnes - 15 - 12 - 41 - 12	Percent -78.069 109.379 -99.469 -52.659 -21.109 -29.739  diget Change Percent -15.159 -17.999 -23.209 -11.879
KC LA WA WRWA Total Change Percentag	26 10 200 1 834 1,071 e Change ste Delivered (T 2014/2015 80 51 193 110	2015/2016 45 37 196 3 858 1,139 67 6.30% 2015/2016 93 60 207 128	44 49 194 3 806 1,095 - 44 -3.89% 2016/2017 101 64 212 123	15 27 172 10 738 964 - 131 -11.96% 2017/2018 94 61 182 100	2018/2019 2 11 0 1 158 172 TO DATE 2018/2019 22 16 36 24	2018/2019 4 - 52 1 - 5 - 575 - 637 - 33.94%  FORECAST 2018/2019 86 - 57 - 136 - 93 - 93	Tonnes  12 25 172 6 163 327  Ann Change Tonnes 9 4 46 8 9	Percent -75.59% 91.03% -99.61% -54.56% -22.09% -33.94%  ual Change Percent -9.17% -6.93% -25.49% -7.89% -14.09%	Tonnes  17 25 125 10 729 906  2018/2019 Budget Tonnes 101 69 177 105	Tonnes  - 13	Percent -78.069 109.379 -99.469 -52.659 -21.109 -29.739  iget Change Percent -15.159 -23.209 -11.879 -25.279
KC LA WA WRWA Total Change Percentag Fridge Wa HF KC LA WA WRWA	26 10 200 1 834 1,071 e Change ste Delivered (T 2014/2015 80 51 193 110 66	2015/2016 45 37 196 3 858 1,139 67 6.30% 2015/2016 93 60 207 128 59	44 49 194 3 806 1,095 - 44 -3.89% 2016/2017 101 64 212 123 86	15 27 172 10 738 964 - 131 -11.96% 2017/2018 94 61 182 100 65 503	2018/2019 2 11 0 1 158 172 TO DATE 2018/2019 22 16 36 24 16	2018/2019 4 - 52 1 - 5 - 637 - 327 - 33.94%  FORECAST 2018/2019 86 - 57 - 136 - 93 - 56 - 56	Tonnes  12 25 172 6 163 327  Ann Change Tonnes 9 4 46 8 9	Percent -75.59% 91.03% -99.61% -54.56% -22.09% -33.94%  ual Change Percent -9.17% -6.93% -25.49% -7.89%	Tonnes  17 25 125 10 729 906  2018/2019 Budget Tonnes 101 69 177 105 75	Tonnes  - 13	Percent -78.06% 109.37% -99.46% -52.65% -21.10% -29.73%

	<b>Waste Deliver</b>	ed (Tonnes)					Ann	ual	2018/2019	Bud	lget
					TO DATE	FORECAST	Change	Change	Budget	Change	Change
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent	Tonnes	Tonnes	Percent
HF	1	1	1	2	0	1 -	1	-30.22%	2	- 1	-35.10%
KC	1	1	0	1	0	0 -	_	-88.91%	1		-93.35%
LA	4	4	2	4	0	1 -	3	-71.21%	4	- 3	-70.21%
WA	1	3	1	2	0	0 -		-72.94%	2		-75.91%
WRWA	-	-	-	19	-		19	-100.00%	19	- 19	-100.00%
Total	6	9	5	27	1	3 -	24	-88.83%	28	- 25	-89.15%
Change		3	- 5	22		- 24					
Percentage	e Change	47.04%	-48.73%	461.98%		-88.83%					
Mixed Glas	ss Waste Delive	ered (Tonnes)					Ann	ual	2018/2019	Bud	lget
					TO DATE	FORECAST	Change	Change	Budget	Change	Change
HF	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent 0.00%	Tonnes	Tonnes	Percent 0.00%
nr KC	-	-	-	-	-	-	-	0.00%	-	-	0.00%
		-	-	-	-	-	-		-	-	
LA A	3	-	-	-	-	-	-	0.00%	-	-	0.00%
NA NBMA	-	-	-	-	-	-	-	0.00%	-	-	0.00%
WRWA	-	-	-	-	-	-	-	0.00%	-	-	0.00%
Γotal	3		-	-	-	-	-	0.00%	-	-	0.00%
Change		- 3	-	-		-					
Percentage	e Change	-100.00%									
nert Wast	te Delivered (To	onnes)					Ann	ual	2018/2019	Bud	lget
		<del></del>			TO DATE	FORECAST	Change	Change	Budget	Change	Change
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent	Tonnes	Tonnes	Percent
HF						, -	-	0.00%	-	-	0.00%
кс	_	_	2	_	_	_	_	0.00%	_	_	0.00%
LA	2	13	10	_	_	_	_	0.00%	_	_	0.00%
WA .	1	12	4	23	_	22 -		-2.00%	23		-2.68%
WRWA	790	830	1,061	1,212	462	1,436	224	18.49%	1,075	361	33.58%
									1,075		
Total	794	855	1,076	1,235	462	1,458	224	18.11%	1,098	360	32.82%
Change		62	221	158		224					
Percentage	e Change	7.78%	25.83%	14.72%		18.11%					
Oil/Paint V	Waste Delivered	d (Tonnes)					Ann	ual	2018/2019	Bud	lget
					TO DATE	FORECAST	Change	Change	Budget	Change	Change
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2018/2019	Tonnes	Percent	Tonnes	Tonnes	Percent
HF		-	-	-	-		-	0.00%	-	_	0.00%
кс	_	_	_	_	_	_	_	0.00%	_	-	0.00%
LA	_	_	_	_	_	_	_	0.00%			0.00%
WA	_	_	_	0				0.0070	_	-	
					_		0	-100 00%	-	_	0.00%
	10	۵	17		- 1	 22	0	-100.00%	- - 16	- - 7	0.00%
	10	9	17	15	4	23	7	46.67%	16	7	41.72%
Total	10 10	9	17	15 15	4 4	23 23					
Total Change	10	9 - 1	17 8	15 15 - 1		23 23 7	7	46.67%	16	7	41.72%
Total Change	10	9	17	15 15		23 23	7	46.67%	16	7	41.72%
WRWA Total Change Percentage	10	9 - 1 -9.60%	17 8 86.28%	15 15 - 1		23 23 7	7	46.67% 46.48%	16	7 7	41.72%
Total Change Percentage	10 e Change	9 - 1 -9.60%	17 8 86.28%	15 15 - 1		23 23 7	7 7	46.67% 46.48%	16 16	7 7	41.72% 41.72%
Total Change Percentage	10 e Change	9 - 1 -9.60%	17 8 86.28%	15 15 - 1	4	23 23 7 46.48%	7 7 <b>Ann</b>	46.67% 46.48% ual	16 16 2018/2019	7 7 Bud	41.72% 41.72%
Total Change Percentage Paper/Care	10 e Change dboard Waste	9 - 1 -9.60% Delivered (Ton	17 8 86.28% nes)	15 15 - 1 -8.08%	4 TO DATE	23 23 7 46.48%	7 7 Ann Change	46.67% 46.48% ual Change	16 16 2018/2019 Budget	7 7 Bud Change	41.72% 41.72% lget Change
Total Change Percentage <u>Paper/Caro</u> HF	10 e Change  dboard Waste  2014/2015	9 - 1 -9.60% Delivered (Ton	17 8 86.28% nes)	15 15 - 1 -8.08%	4 TO DATE	23 23 7 46.48%	7 7 Ann Change	46.67% 46.48% ual Change Percent	16 16 2018/2019 Budget	7 7 Bud Change	41.72% 41.72% Iget Change Percent
Total Change Percentage  Paper/Care  HF KC	10 e Change  dboard Waste   2014/2015	9 - 1 -9.60% Delivered (Ton 2015/2016 -	17 8 86.28% nes) 2016/2017	15 15 - 1 -8.08% 2017/2018	TO DATE 2018/2019	23 23 7 46.48% FORECAST 2018/2019	7 7 7 Ann Change Tonnes	46.67% 46.48% ual Change Percent 0.00%	16 16 2018/2019 Budget Tonnes	Buc Change Tonnes	41.72% 41.72% Iget Change Percent 0.00%
Total Change Percentage  Paper/Care  HF KC LA	10 e Change  dboard Waste    2014/2015	9 - 1 -9.60% Delivered (Ton 2015/2016 - -	17 8 86.28% nes) 2016/2017 - -	15 15 - 1 -8.08% 2017/2018 -	TO DATE 2018/2019	23 23 7 46.48% FORECAST 2018/2019	7 7 7 Ann Change Tonnes	46.67% 46.48% ual Change Percent 0.00% 0.00% -6.22%	16 16 2018/2019 Budget Tonnes	Buc Change Tonnes	41.72% 41.72% lget Change Percent 0.00% 0.00% -17.76%
Total Change Percentage  Paper/Care  HF KC LA WA	10 e Change  dboard Waste  2014/2015	9 - 1 -9.60% Delivered (Ton 2015/2016  255 -	17 8 86.28% nes) 2016/2017 - - - 321	15 15 - 1 -8.08% 2017/2018 - - - 484 -	TO DATE 2018/2019	23 23 7 46.48% FORECAST 2018/2019 - - 454 -	Ann Change Tonnes 30	46.67% 46.48% ual Change Percent 0.00% 0.00% -6.22% 0.00%	2018/2019 Budget Tonnes 552	Bud Change Tonnes - - - 98	41.72% 41.72% lget Change Percent 0.00% -17.76% 0.00%
Total Change Percentage  Paper/Care  HF KC LA WA WRWA	10 e Change  dboard Waste  2014/2015	9 - 1 -9.60%  Delivered (Ton  2015/2016 255 - 713	17 8 86.28% nes) 2016/2017 - - 321 - 806	15 15 - 1 -8.08% 2017/2018  484 - 827	TO DATE 2018/2019 112 - 180	23 23 7 46.48% FORECAST 2018/2019 - - 454 - - 618 -	Ann Change Tonnes 30 - 210	46.67% 46.48% ual Change Percent 0.00% -6.22% 0.00% -25.37%	2018/2019 Budget Tonnes - - - 552 - 886	### 7 7 7 7 7 7 8 8 10 10 10 10 10 10 10 10 10 10 10 10 10	41.72% 41.72% lget Change Percent 0.00% -17.76% 0.00% -30.30%
Total Change Percentage  Paper/Care  HF KC LA WA WRWA Total	10 e Change  dboard Waste  2014/2015	9 - 1 -9.60%  Delivered (Ton 2015/2016 255 - 713 968	17 8 86.28% nes) 2016/2017 - 321 - 806 1,127	15 15 - 1 -8.08% 2017/2018  484 - 827 1,311	TO DATE 2018/2019	23 23 7 46.48% FORECAST 2018/2019 - - - 454 - - 618 - 1,071 -	Ann Change Tonnes 30 - 210	46.67% 46.48% ual Change Percent 0.00% 0.00% -6.22% 0.00%	2018/2019 Budget Tonnes 552	### 7 7 7 7 7 7 8 8 10 10 10 10 10 10 10 10 10 10 10 10 10	41.72% 41.72% lget Change Percent 0.00% -17.76% 0.00%
Total Change Percentage Paper/Care  HF KC LA WA WRWA Total Change	10 e Change  dboard Waste    2014/2015	9 - 1 -9.60%  Delivered (Ton  2015/2016 255 - 713	17 8 86.28% nes) 2016/2017 - - 321 - 806	15 15 - 1 -8.08% 2017/2018  484 - 827	TO DATE 2018/2019 112 - 180	23 23 7 46.48% FORECAST 2018/2019 - - 454 - - 618 -	Ann Change Tonnes 30 - 210	46.67% 46.48% ual Change Percent 0.00% -6.22% 0.00% -25.37%	2018/2019 Budget Tonnes - - - 552 - 886	### 7 7 7 7 7 7 8 8 10 10 10 10 10 10 10 10 10 10 10 10 10	41.72% 41.72% lget Change Percent 0.00% -17.76% 0.00% -30.30%
Total Change Percentage Paper/Care  HF KC LA WA WRWA Total Change Percentage	10 e Change  dboard Waste    2014/2015	9 - 1 -9.60%  Delivered (Ton 2015/2016 255 - 713 968 97 11.12%	17 8 86.28% nes) 2016/2017 - 321 - 806 1,127 159	15 15 - 1 -8.08% 2017/2018 - - 484 - 827 1,311 185	TO DATE 2018/2019 112 - 180	23 23 7 46.48% FORECAST 2018/2019 - - 454 - - 618 - 1,071 - 240	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	46.67% 46.48% Uual Change Percent 0.00% 0.00% -6.22% 0.00% -25.37% -18.30%	2018/2019 Budget Tonnes 552 - 886 1,438	8uc Change Tonnes 98 - 268 - 367	41.72% 41.72% 41.72% Change Percent 0.00% -17.76% 0.00% -30.30% -25.49%
Total Change Percentage Paper/Care  HF KC LA WA WRWA Total Change Percentage	10 e Change  dboard Waste    2014/2015	9 - 1 -9.60%  Delivered (Ton 2015/2016 255 - 713 968 97 11.12%	17 8 86.28% nes) 2016/2017 - 321 - 806 1,127 159	15 15 - 1 -8.08% 2017/2018 - - 484 - 827 1,311 185	TO DATE 2018/2019 112 - 180	23 23 7 46.48% FORECAST 2018/2019 - - 454 - - 618 - 1,071 - 240	Ann Change Tonnes 30 - 210	46.67% 46.48% Uual Change Percent 0.00% 0.00% -6.22% 0.00% -25.37% -18.30%	2018/2019 Budget Tonnes - - - 552 - 886	8uc Change Tonnes 98 - 268 - 367	41.72% 41.72% lget Change Percent 0.00% -17.76% 0.00% -30.30%
Total Change Percentage Paper/Care  HF KC LA WA WRWA Total Change Percentage	dboard Waste    2014/2015	9 - 1 -9.60%  Delivered (Ton  2015/2016 255 - 713 968 97 11.12%	17 8 86.28% 2016/2017 - - 321 - 806 1,127 159 16.42%	15 15 - 1 -8.08% 2017/2018  484 - 827 1,311 185 16.39%	TO DATE 2018/2019	23 23 7 46.48% FORECAST 2018/2019 - - - 454 - - 618 - 1,071 - 240 -18.30%	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	46.67% 46.48% Ual  Change Percent 0.00% 0.00% -6.22% 0.00% -25.37% -18.30%	2018/2019 Budget Tonnes - - 552 - 886 1,438	8uc Change Tonnes 98 - 268 - 367	41.72% 41.72% 41.72% lget Change Percent 0.00% 0.00% -17.76% 0.00% -30.30% -25.49%
Total Change Percentage Paper/Care HF KC LA WA WRWA Total Change Percentage	10 e Change  2014/2015	9 - 1 -9.60%  Delivered (Ton  2015/2016 255 - 713 968 97 11.12%  ered (Tonnes)	17 8 86.28% 2016/2017 - - 321 - 806 1,127 159 16.42%	15 15 - 1 -8.08% 2017/2018  484 - 827 1,311 185 16.39%	TO DATE 2018/2019	23 23 7 46.48% FORECAST 2018/2019	Ann Change Tonnes 30 - 210 240  Ann Change Tonnes	46.67% 46.48% ual Change Percent 0.00% -6.22% 0.00% -25.37% -18.30%	2018/2019 Budget Tonnes 552 - 886 1,438	Bud Change Tonnes 98 - 268 - 367 Bud Change Tonnes	41.72% 41.72% 41.72% Iget Change Percent 0.00% 0.00% -17.76% 0.00% -30.30% -25.49%
Total Change Percentage Paper/Care HF KC LA WA WRWA Total Change Percentage Fercentage HF	10 e Change  dboard Waste  2014/2015	9 - 1 -9.60%  Delivered (Ton 2015/2016 - 255 - 713 968 97 11.12%  ered (Tonnes) 2015/2016 8	17 8 86.28% 2016/2017 - - 321 - 806 1,127 159 16.42%	15 15 - 1 -8.08% 2017/2018  484 - 827 1,311 185 16.39% 2017/2018 13	TO DATE 2018/2019	23 23 7 46.48% FORECAST 2018/2019 - - - 454 - - 618 - 1,071 - 240 -18.30%	Ann Change Tonnes  - 30 - 210 240  Ann Change Tonnes	46.67% 46.48% ual Change Percent 0.00% -6.22% 0.00% -25.37% -18.30% ual Change Percent -69.23%	2018/2019 Budget Tonnes - - 552 - 886 1,438 2018/2019 Budget Tonnes 16	Bud Change Tonnes 98 - 268 - 367 Bud Change Tonnes	41.72% 41.72% 41.72% Iget Change Percent 0.00% 0.00% -17.76% 0.00% -30.30% -25.49% Iget Change Percent -75.31%
Total Change Percentage Paper/Care HF KC LA WA WRWA Total Change Percentage Scrap Meta	10 e Change  dboard Waste  2014/2015	9 - 1 -9.60%  Delivered (Ton  2015/2016 - 255 - 713 968 97 11.12%  ered (Tonnes)  2015/2016 8 3	17 8 86.28% 2016/2017	15 15 - 1 -8.08% 2017/2018  484 - 827 1,311 185 16.39% 2017/2018 13 1	TO DATE 2018/2019 112 - 180 292  TO DATE 2018/2019 2	23 23 7 46.48%  FORECAST 2018/2019  - 454 - 618 - 1,071 - 240 -18.30%  FORECAST 2018/2019  4 -	Ann Change Tonnes  30 - 210 240  Ann Change Tonnes	46.67% 46.48% ual Change Percent 0.00% -6.22% 0.00% -25.37% -18.30% ual Change Percent -69.23% -100.00%	2018/2019 Budget Tonnes 552 - 886 1,438  2018/2019 Budget Tonnes - 16 1	Buc Change - 98 - 268 - 367 - Buc Change Tonnes - 12 - 1	41.72% 41.72% 41.72% Iget Change Percent 0.00% -17.76% 0.00% -30.30% -25.49% Iget Change Percent -75.31% -100.00%
Total Change Percentage Paper/Card HF KC LA WA WRWA Total Change Percentage Scrap Meta	10 e Change  dboard Waste    2014/2015	9 - 1 -9.60%  Delivered (Ton 2015/2016 - 255 - 713 968 97 11.12%  Pered (Tonnes) 2015/2016 8 3 128	17 8 86.28% 2016/2017	15 15 - 1 -8.08% 2017/2018 - - 484 - 827 1,311 185 16.39% 2017/2018 13 1 115	TO DATE 2018/2019 112 - 180 292  TO DATE 2018/2019 2 - 20	23 23 7 46.48%  FORECAST 2018/2019  - 454 - 618 - 1,071 - 240 -18.30%  FORECAST 2018/2019  4 - 60 - 60 -	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	46.67% 46.48% ual Change Percent 0.00% -6.22% 0.00% -25.37% -18.30% ual Change Percent -69.23% -100.00% -47.52%	2018/2019 Budget Tonnes  552 - 886 1,438  2018/2019 Budget Tonnes 16 1 120	Buc Change - 98 - 268 - 367 - Tonnes - 12 - 12 - 60	41.72% 41.72% 41.72% Iget Change Percent 0.00% -17.76% 0.00% -30.30% -25.49% Iget Change Percent -75.31% -100.00% -49.81%
Total Change Percentage Paper/Care HF KC LA WA WRWA Total Change Percentage Scrap Meta	10 e Change  dboard Waste    2014/2015	9 - 1 -9.60%  Delivered (Ton 2015/2016 - 255 - 713 968 97 11.12%  ered (Tonnes) 2015/2016 8 3 128 -	17 8 86.28% nes)  2016/2017	15 15 - 1 -8.08% 2017/2018 - - 484 - 827 1,311 185 16.39% 2017/2018 13 1 115 2	TO DATE 2018/2019	23 23 7 46.48%  FORECAST 2018/2019  - 454 - 618 - 1,071 - 240 -18.30%  FORECAST 2018/2019  4 - 60 - 2 -	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	46.67% 46.48% Uual Change Percent 0.00% 0.00% -6.22% 0.00% -25.37% -18.30% Uual Change Percent -69.23% -100.00% -47.52% -2.00%	2018/2019 Budget Tonnes 552 - 886 1,438  2018/2019 Budget Tonnes - 16 - 1 120 - 1	Buc Change - 98 - 268 - 367 - Tonnes - 12 - 1 - 60 1	41.72% 41.72% 41.72% Change Percent 0.00% -17.76% 0.00% -30.30% -25.49% Get Change Percent -75.31% -100.00% -49.81% 80.32%
Total Change Percentage Paper/Care  HF KC LA WA WRWA Total Change Percentage  Scrap Meta  HF KC LA WA WRWA	10 e Change  dboard Waste    2014/2015	9 - 1 -9.60%  Delivered (Ton 2015/2016 - 255 - 713 968 97 11.12%  ered (Tonnes) 2015/2016 8 3 128 - 573	17 8 86.28% 2016/2017 321 - 806 1,127 159 16.42% 2016/2017 11 1 1 150 0 697	15 15 - 1 -8.08% 2017/2018 - - 484 - 827 1,311 185 16.39% 2017/2018 13 1 115 2 687	TO DATE 2018/2019	23 23 7 46.48%  FORECAST 2018/2019 454 - 618 - 1,071 - 240 -18.30%  FORECAST 2018/2019 4 - 60 - 60 - 695	Ann Change Tonnes  Ann Change Tonnes  -	46.67% 46.48% Uual Change Percent 0.00% 0.00% -6.22% 0.00% -25.37% -18.30% Uual Change Percent -69.23% -100.00% -47.52% -2.00% 1.14%	2018/2019 Budget Tonnes 552 - 886 1,438  2018/2019 Budget Tonnes	Buc Change - 98 - 268 - 367 - 212 - 12 - 600 1 - 12	41.72% 41.72% 41.72% Iget Change Percent 0.00% -17.76% 0.00% -30.30% -25.49% Iget Change Percent -75.31% -100.00% -49.81% 80.32% -1.66%
Total Change Percentage Paper/Care  HF KC LA WA WRWA Total Change Percentage  Scrap Meta  HF KC LA WA WRWA Total URA WRWA Total	10 e Change  dboard Waste    2014/2015	9 - 1 -9.60%  Delivered (Ton  2015/2016 255 - 713 968 97 11.12%  Pered (Tonnes)  2015/2016 8 3 128 - 573 711	17 8 86.28% 2016/2017 - 321 - 806 1,127 159 16.42% 2016/2017 11 1 1 150 0 697 859	15 15 - 1 -8.08% 2017/2018 - - - 484 - 827 1,311 185 16.39% 2017/2018 13 1 115 2 687 818	TO DATE 2018/2019	23 23 7 46.48%  FORECAST 2018/2019 454 618 1,071 240 -18.30%  FORECAST 2018/2019 4 60 60 60 60 695 761	Ann Change Tonnes  Ann Change Tonnes  -	46.67% 46.48% Uual Change Percent 0.00% 0.00% -6.22% 0.00% -25.37% -18.30% Uual Change Percent -69.23% -100.00% -47.52% -2.00%	2018/2019 Budget Tonnes 552 - 886 1,438  2018/2019 Budget Tonnes - 16 - 1 120 - 1	Buc Change - 98 - 268 - 367 - 212 - 12 - 600 1 - 12	41.72% 41.72% 41.72% Change Percent 0.00% -17.76% 0.00% -30.30% -25.49% Get Change Percent -75.31% -100.00% -49.81% 80.32%
Total Change Percentage  Paper/Care  HF KC LA WA WRWA Total Change Percentage	10 e Change  dboard Waste    2014/2015	9 - 1 -9.60%  Delivered (Ton 2015/2016 - 255 - 713 968 97 11.12%  ered (Tonnes) 2015/2016 8 3 128 - 573	17 8 86.28% 2016/2017 321 - 806 1,127 159 16.42% 2016/2017 11 1 1 150 0 697	15 15 - 1 -8.08% 2017/2018 - - - 484 - 827 1,311 185 16.39% 2017/2018 13 1 115 2 687 818	TO DATE 2018/2019	23 23 7 46.48%  FORECAST 2018/2019 454 - 618 - 1,071 - 240 -18.30%  FORECAST 2018/2019 4 - 60 - 60 - 695	Ann Change Tonnes  Ann Change Tonnes  -	46.67% 46.48% Uual Change Percent 0.00% 0.00% -6.22% 0.00% -25.37% -18.30% Uual Change Percent -69.23% -100.00% -47.52% -2.00% 1.14%	2018/2019 Budget Tonnes 552 - 886 1,438  2018/2019 Budget Tonnes	Buc Change - 98 - 268 - 367 - 212 - 12 - 600 1 - 12	41.72% 41.72% 41.72% Iget Change Percent 0.00% -17.76% 0.00% -30.30% -25.49% Iget Change Percent -75.31% -100.00% -49.81% 80.32% -1.66%

## Appendix A

Part		aste Delivered (	Tonnes)					Ann	ual	2018/2019	Bud	get
F		2014/2015	2015/2016	2016/2017	2017/2018			Change Tonnes	-	_	_	-
KC         -         -         -         -         -         -         0.00%         -         0.00%           WA         -         -         -         -         -         0.00%         -         -         0.00%           WRWA         178         204         209         205         90         347         142         69.65%         200         147         73.50%           Total         178         204         209         205         90         347         142         69.65%         200         147         73.50%           Change         20         5         5         5         5         142         96.65%         200         147         73.50%           Tyre Waste Delivered (Tomes)         2014/2015         2016/2016         2016/2017         2017/2018         2018/2019         PORECATS PORECATS 100         Porecent         Tomas         Porecent         Tomas         Porecent         Tomas         Porecent         Tomas         Porecent         Porece	HE		-	-	-	-	-	-				
LA         ·         ·         ·         ·         ·         ·         ·         ·         0		_	_	_	_	_	_	_		_	_	
MRWA		_	_	_	_	_	_	_		_	_	
MRVM		_	_	_	_	_	_	_		_	_	
Total         178         204         209         205         5         5         5         5         5         142         69.63%         2.00         1.01         7.00         7.		178	204	209	205	90	347	142		200	147	
Change         26         5         5         5         142         Forecasting Change         14.88%         2.49%         2.25%         69.65%         ABJUST Change         Change         Budget         Change         Percent         7014/2015         2014/2015         2015/2016         2016/2017         2018/2019         FORECAST Change         Percent         Tonnes         Forecast Change         2014/2015         2014/2015         2016/2017         2018/2019         FORECAST Change         Percent         Tonnes         Ton 0.00%           NA         2         1         2         2         6         6         5.598%         11         5         -49.36%           WA         2         1         1         3         3         7         5         -41.92%         13         5         -42.73%           Change         -2.119%         11.16%         13.45%         2         -5         -41.92%         -41.92%         -41.92%         -41.92%         -41.92%         -41.92%         -41.92%         -41.92%         -41.9												
Percentage Change         14.88%         2.49%         c.2.25%         c.2.25%         c.96.55%         Change         Chan		1,0				30			03.0370	200	,	75.5070
Port	-	ge Change										
Port	Turo Wast	to Dolivered (To	nnos)					Ann	ual	2019/2010	Rud	lgot.
Percent   Pe	i yie vvast	re penseren (10	<u>esj</u>			TO DATE	FORFCAST			•		-
HF		2014/2015	2015/2016	2016/2017	2017/2019			_	-	-	_	-
KC         0         -         0         0         -         0         2.00%         -         0         0.00%           LA         14         11         8         12         2         6         6         -51.99%         11         5         49.36%           WA         2         1         2         0         0         36.89%         2         -         1         26.08%           WRWA         -         0         -         -         0         0         0         0.00%         -         1         26.00%           Change         -         3         1         12         0         -         5         -         41.92%         -	HE				•	•	•			ronnes		
LA         14         11         8         12         2         6         6         51.98%         11         5         49.36%           WA         2         1         2         1         0         1         0         36.89%         2         2         1         26.08%           WRWA         -         0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td>-</td><td></td><td></td></t<>								-		-		
WA         2         1         2         1         0         1         0         36.89%         2         1         2-6.08%         WRWA         -         0         0         0         0.00%         -         0         0.00%         0         0.00%         -         0         0.00%         0         0.00%         -         0         0.00%         0         0.00%         -         1         2         0         0.00%         0         0.00%         -         1         6         42.73%         0         0         0.00%         -         1         6         42.73%         0         0         0         0.00%         -         1         6         42.73%         0         4         2         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         2         4         1         4         0         2         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0										- 11		
WRWA         -         0         -         -         0         0         0.00%         -         0         0.00%           Total         16         13         11         13         3         7         5         -41.92%         13         -6         42.73%           Change         -3         -1         1.2         -5         -41.92%												
Total         16         13         11         13         3         7         5         -41.92%         -41.92%         -42.73%         -42.73%         -42.73%         -42.73%         -43.93%         -41.92%		2		2	1	-		-		2 -		
Change Percentage Change         - 3 d - 21.19%         - 11.16%         13.45%         - 41.92%         - 41.92%         41.92% <t< th=""><th></th><th>- 16</th><th></th><th>- 11</th><th>- 12</th><th></th><th></th><th></th><th></th><th>- 12</th><th></th><th></th></t<>		- 16		- 11	- 12					- 12		
Percentage Change         -21.19%         -11.16%         13.45%         -41.92%         -		10				3		Э	-41.92%	15	- 0	-42.73%
Mood Waste Delivered   Tonnes	_	o Change										
HF         -         -         -         -         -         -         0.00%         C         -         0.00%         KC         -         0.00%         KC         -         0.00%         KC         -         0.00%         C         0.00%         1         0         3.88%         LA         4.56         366         273         245         66         213         -         0.00%         238         -         5.00%         238         -         5.00%         238         -         5.00%         2.00%         238         -         5.00%         0.00%         WRWA         2,86         3,022         3,233         3,465         911         3,032         -         164         -         4.82%         3,470         -         224         -6.45%           Change         Change         72         109         86         -         164         -         4.82%         -         -         -         -         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45%         -6.45% <th>Wood Wa</th> <th>ste Delivered (T</th> <th><u>'onnes)</u></th> <th></th> <th></th> <th>TO DATE</th> <th>FORECAST</th> <th></th> <th></th> <th>•</th> <th></th> <th>-</th>	Wood Wa	ste Delivered (T	<u>'onnes)</u>			TO DATE	FORECAST			•		-
KC         -         -         -         1         -         1         -         0         -2.00%         1         0         3.88%           LA         456         366         273         245         66         213         -         2         0.00%         238         -         25         -10.53%           WA         -         -         -         -         -         0.00%         -         -         0.00%           WRWA         2,860         3,022         3,223         3,411         977         3,246         -         164         -         164         -         120         3,470         -         20.15%         -         -         164         - <t< th=""><th></th><th>2014/2015</th><th>2015/2016</th><th>2016/2017</th><th>2047/2040</th><th>2010/2010</th><th></th><th>_</th><th>Percent</th><th>-</th><th>Tonnes</th><th></th></t<>		2014/2015	2015/2016	2016/2017	2047/2040	2010/2010		_	Percent	-	Tonnes	
LA         456         366         273         245         66         213         - 32         -13.00%         238         - 25         -10.53%           WA         -         -         -         -         -         -         0.00%         -         -         0.00%           WRWA         2,860         3,022         3,223         3,411         977         3,246         - 164         -4.82%         3,470         - 224         -6.45%           Change         72         109         - 86         - 164         - 4.82%         - 4.82%         - 2014/2015         - 2014/2015         3.211         - 2.45%         - 4.82%	HF	-	2013/2010	2016/2017	2017/2018	2018/2019	2018/2019	Ionnes	· crcciic	Ionnes		Percent
WA         -         -         -         -         -         -         -         0.00%         -         -         0.00%           WRWA         2,860         3,022         3,223         3,165         911         3,032         -         133         -4.19%         3,231         -         199         -6.15%           Total         3,316         3,387         3,496         3,411         977         3,246         -         164         -4.82%         3,470         -         224         -6.45%           Change         72         109         -86         -         -164         -				-	2017/2018		2018/2019	Ionnes -		Ionnes -		
WRWA         2,860         3,022         3,223         3,165         911         3,032         - 133         -4.19%         3,231         - 199         -6.15%           Total         3,316         3,387         3,496         3,411         977         3,246         - 164         -4.82%         3,470         - 224         -6.45%           Change         72         109         - 86         - 164         - 4.82%        4.82% <t< td=""><td>KC</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>0.00%</td><td>-</td><td>-</td><td>0.00%</td></t<>	KC	-	-	-	-	-	-	-	0.00%	-	-	0.00%
Total Octange         3,316 Percentage         3,387 Percentage         3,496 Percentage         3,411 Percentage         977 Percentage         3,496 Percentage         3,411 Percentage         977 Percentage         3,496 Percentage         3,411 Percentage         977 Percentage         164 Percentage         - 164 Percentage			-	-	1	-	1 -	- 0	0.00% -2.00%	- 1	- 0	0.00% 3.88%
Change Percentage Change         72	LA	456	- - 366	- - 273	1 245	- - 66	1 - 213 -	0 32	0.00% -2.00% -13.00%	1 238	- 0 - 25	0.00% 3.88% -10.53%
Percentage Change         2.16%         3.21%         -2.45%         -4.82%         -4.82%         -4.82%         -4.82%         -2.11%         -5.45%         -2.118/2019         -3.218/2019         -5.218/2019         -5.218/2019         -5.2018	LA WA	456 -	- - 366 -	- 273	1 245 -	- - 66 -	1 - 213 -	- 0 32 -	0.00% -2.00% -13.00% 0.00%	1 238	- 0 - <b>2</b> 5 -	0.00% 3.88% -10.53% 0.00%
Total Waste Delivered (Tornes)  TODATE FORECAST Change Percent  TODATE FORECAST Change Percen	LA WA WRWA	456 - 2,860	- 366 - 3,022	- 273 - 3,223	1 245 - 3,165	- - 66 - 911	1 - 213 - - 3,032 -	- 0 32 - 133	0.00% -2.00% -13.00% 0.00% -4.19%	1 238 - 3,231	- 0 - 25 - - 199	0.00% 3.88% -10.53% 0.00% -6.15%
TO DATE   FORECAST   Change	LA WA WRWA Total	456 - 2,860	- 366 - 3,022 3,387	- 273 - 3,223 3,496	1 245 - 3,165 3,411	- - 66 - 911	1 - 213 - - 3,032 - 3,246 -	- 0 32 - 133	0.00% -2.00% -13.00% 0.00% -4.19%	1 238 - 3,231	- 0 - 25 - - 199	0.00% 3.88% -10.53% 0.00% -6.15%
LA         2014/2015         2015/2016         2016/2017         2017/2018         2018/2019         2018/2019         Tonnes         Percent         Tonnes         Tonnes         Percent           HF         73,915         74,234         73,236         70,785         18,065         69,684         - 1,101         -1.55%         71,187         - 1,503         -2.11%           KC         79,110         79,068         77,613         76,597         19,354         76,014         - 583         -0.76%         76,840         - 826         -1.08%           LA         115,284         114,046         113,172         111,477         28,412         111,121         - 356         -0.32%         112,125         - 1,004         -0.90%           WA         100,766         102,539         102,442         100,395         25,774         100,656         261         0.26%         100,522         134         0.13%           WRWA         22,096         21,778         22,277         21,208         6,351         20,071         - 1,137         -5.36%         21,833         - 1,762         -8.07%           Total         391,171         391,665         388,741         380,462         97,956         377,546         2,916<	LA WA WRWA Total Change	456 - 2,860 3,316	- 366 - 3,022 3,387 72	273 - 3,223 3,496 109	1 245 - 3,165 3,411 - 86	- - 66 - 911	1 - 213 - - 3,032 - 3,246 -	- 0 32 - 133	0.00% -2.00% -13.00% 0.00% -4.19%	1 238 - 3,231	- 0 - 25 - - 199	0.00% 3.88% -10.53% 0.00% -6.15%
HF         73,915         74,234         73,236         70,785         18,065         69,684         -         1,101         -1.55%         71,187         -         1,503         -2.11%           KC         79,110         79,068         77,613         76,597         19,354         76,014         -         583         -0.76%         76,840         -         826         -1.08%           LA         115,284         114,046         113,172         111,477         28,412         111,121         -         356         -0.32%         112,125         -         1,004         -0.90%           WA         100,766         102,539         102,442         100,395         25,774         100,656         261         0.26%         100,522         134         0.13%           WRWA         22,096         21,778         22,277         21,208         6,351         20,071         -         1,137         -5.36%         21,833         -         1,762         -8.07%           Total         391,171         391,665         388,741         380,462         97,956         377,546         -         2,916         -0.77%         382,507         -         4,961         -1.30%           Change	LA WA WRWA Total Change Percentag	456 - 2,860 3,316 ge Change	- 366 - 3,022 3,387 72 2.16%	273 - 3,223 3,496 109	1 245 - 3,165 3,411 - 86	- - 66 - 911	1 - 213 - - 3,032 - 3,246 -	0 32 - 133 164	0.00% -2.00% -13.00% 0.00% -4.19% -4.82%	1 238 - 3,231 - 3,470 -	- 0 - 25 - - 199 - 224	0.00% 3.88% -10.53% 0.00% -6.15% -6.45%
KC         79,110         79,068         77,613         76,597         19,354         76,014         - 583         -0.76%         76,840         - 826         -1.08%           LA         115,284         114,046         113,172         111,477         28,412         111,121         - 356         -0.32%         112,125         - 1,004         -0.90%           WA         100,766         102,539         102,442         100,395         25,774         100,656         261         0.26%         100,522         134         0.13%           WRWA         22,096         21,778         22,277         21,208         6,351         20,071         - 1,137         -5.36%         21,833         - 1,762         -8.07%           Total         391,171         391,665         388,741         380,462         97,956         377,546         - 2,916         -0.77%         382,507         - 4,961         -1.30%           Change         494         - 2,924         - 8,279         - 2,916         - 2,916         - 0.77%         382,507         - 4,961         - 1.30%	LA WA WRWA Total Change Percentag	456 - 2,860 3,316 ge Change	- 366 - 3,022 3,387 72 2.16%	273 - 3,223 3,496 109	1 245 - 3,165 3,411 - 86	66 - 911 977	1 - 213 - 3,032 - 3,246 - 164 -4.82%	- 0 32 - 133 164	0.00% -2.00% -13.00% 0.00% -4.19% -4.82%	238 - 3,231 - 3,470 - 2018/2019	- 0 - 25 - 199 - 224	0.00% 3.88% -10.53% 0.00% -6.15% -6.45%
LA 115,284 114,046 113,172 111,477 28,412 111,121 - 356 -0.32% 112,125 - 1,004 -0.90% WA 100,766 102,539 102,442 100,395 25,774 100,656 261 0.26% 100,522 134 0.13% WRWA 22,096 21,778 22,277 21,208 6,351 20,071 - 1,137 -5.36% 21,833 - 1,762 -8.07% Total 391,171 391,665 388,741 380,462 97,956 377,546 - 2,916 -0.77% 382,507 - 4,961 -1.30% Change 494 - 2,924 - 8,279 - 2,916	LA WA WRWA Total Change Percentag	456 - 2,860 3,316 ge Change	- 366 - 3,022 3,387 72 2.16%	273 - 3,223 3,496 109 3.21%	1 245 - 3,165 3,411 - 86 -2.45%	- - - 66 - 911 977	1 - 213 - 3,032 - 3,246 - 164 -4.82%	0 32 - 133 164 Ann Change	0.00% -2.00% -13.00% 0.00% -4.19% -4.82%	2018/2019 Budget	- 0 - 25 - 199 - 224 Bud Change	0.00% 3.88% -10.53% 0.00% -6.15% -6.45%
WA       100,766       102,539       102,442       100,395       25,774       100,656       261       0.26%       100,522       134       0.13%         WRWA       22,096       21,778       22,277       21,208       6,351       20,071       -       1,137       -5.36%       21,833       -       1,762       -8.07%         Total       391,171       391,665       388,741       380,462       97,956       377,546       -       2,916       -0.77%       382,507       -       4,961       -1.30%         Change       494       -       2,924       -       8,279       -       2,916       - <td< td=""><td>LA WA WRWA Total Change Percentag</td><td>456 - 2,860 3,316 ge Change ste Delivered (To</td><td>- 366 - 3,022 3,387 72 2.16%</td><td>273 - 3,223 3,496 109 3.21%</td><td>1 245 - 3,165 3,411 - 86 -2.45%</td><td>- 66 - 911 977 TO DATE 2018/2019</td><td>1 - 213 - 3,032 - 3,246 - 164 -4.82% FORECAST 2018/2019</td><td>0 32 - 133 164 Ann Change Tonnes</td><td>0.00% -2.00% -13.00% 0.00% -4.19% -4.82%</td><td>2018/2019 Budget Tonnes</td><td>- 0 - 25 - 199 - 224 Bud Change Tonnes</td><td>0.00% 3.88% -10.53% 0.00% -6.15% -6.45%</td></td<>	LA WA WRWA Total Change Percentag	456 - 2,860 3,316 ge Change ste Delivered (To	- 366 - 3,022 3,387 72 2.16%	273 - 3,223 3,496 109 3.21%	1 245 - 3,165 3,411 - 86 -2.45%	- 66 - 911 977 TO DATE 2018/2019	1 - 213 - 3,032 - 3,246 - 164 -4.82% FORECAST 2018/2019	0 32 - 133 164 Ann Change Tonnes	0.00% -2.00% -13.00% 0.00% -4.19% -4.82%	2018/2019 Budget Tonnes	- 0 - 25 - 199 - 224 Bud Change Tonnes	0.00% 3.88% -10.53% 0.00% -6.15% -6.45%
WRWA       22,096       21,778       22,277       21,208       6,351       20,071       -       1,137       -5.36%       21,833       -       1,762       -8.07%         Total       391,171       391,665       388,741       380,462       97,956       377,546       -       2,916       -0.77%       382,507       -       4,961       -1.30%         Change       494       -       2,924       -       8,279       -       2,916       -       -       -       -       4,961       -1.30%	LA WA WRWA Total Change Percentag	456 - 2,860 3,316 ge Change ste Delivered (To 2014/2015 73,915	- 366 - 3,022 3,387 72 2.16% 2015/2016 74,234	273 - 3,223 3,496 109 3.21% 2016/2017 73,236	1 245 - 3,165 3,411 - 86 -2.45% 2017/2018 70,785	- 66 - 911 977 TO DATE 2018/2019	1 - 213 - 3,032 - 3,246 - 164 - 4.82%  FORECAST 2018/2019 69,684 -	0 32 - 133 164 Ann Change Tonnes	0.00% -2.00% -13.00% 0.00% -4.19% -4.82%  ual Change Percent -1.55%	2018/2019 Budget Tonnes 71,187	0 25 - 199 224 Bud Change Tonnes 1,503	0.00% 3.88% -10.53% 0.00% -6.15% -6.45% get Change Percent -2.11%
Total         391,171         391,665         388,741         380,462         97,956         377,546         -         2,916         -0.77%         382,507         -         4,961         -1.30%           Change         494         -         2,924         -         8,279         -         2,916         -         -0.77%         382,507         -         4,961         -1.30%	LA WA WRWA Total Change Percentag  Total Was	456 - 2,860 3,316 ge Change ste Delivered (To 2014/2015 73,915 79,110	- - 366 - 3,022 3,387 72 2.16% 2015/2016 74,234 79,068	273 - 3,223 3,496 109 3.21% 2016/2017 73,236 77,613	245 - 3,165 3,411 - 86 -2.45% 2017/2018 70,785 76,597	- 66 - 911 977 TO DATE 2018/2019 18,065 19,354	1 - 213 - 3,032 - 3,246 - 164 -4.82%  FORECAST 2018/2019 69,684 - 76,014 -	0 32 - 133 164 Ann Change Tonnes 1,101 583	0.00% -2.00% -13.00% 0.00% -4.19% -4.82%  ual Change Percent -1.55% -0.76%	2018/2019 Budget Tonnes 71,187 76,840	0 25 - 199 224  Bud Change Tonnes - 1,503 826	0.00% 3.88% -10.53% 0.00% -6.15% -6.45% get Change Percent -2.11% -1.08%
Change 494 - 2,924 - 8,279 - 2,916	LA WA WRWA Total Change Percentag  Total Was  HF KC LA	456 - 2,860 3,316 ge Change ste Delivered (To 2014/2015 73,915 79,110 115,284	- 366 - 3,022 3,387 72 2.16% 2015/2016 74,234 79,068 114,046	273 - 3,223 3,496 109 3.21% 2016/2017 73,236 77,613 113,172	245 - 3,165 3,411 - 86 -2.45% 2017/2018 70,785 76,597 111,477	TO DATE 2018/2019 18,065 19,354 28,412	1 - 213 - 3,032 - 3,246 - 164 -4.82%  FORECAST 2018/2019 69,684 - 76,014 - 111,121 -	0 32 - 133 164 Ann Change Tonnes 1,101 583 356	0.00% -2.00% -13.00% 0.00% -4.19% -4.82%  Change Percent -1.55% -0.76% -0.32%	2018/2019 Budget Tonnes 71,187 76,840 112,125	0 25 - 199 224  Bud Change Tonnes - 1,503 826 - 1,004	0.00% 3.88% -10.53% 0.00% -6.15% -6.45%  get Change Percent -2.11% -1.08% -0.90%
	LA WA WRWA Total Change Percentag  Total Was  HF KC LA WA	456 - 2,860 3,316 ge Change ste Delivered (To 2014/2015 73,915 79,110 115,284 100,766	366 - 3,022 3,387 72 2.16% 2015/2016 74,234 79,068 114,046 102,539	273 - 3,223 3,496 109 3.21% 2016/2017 73,236 77,613 113,172 102,442	245 - 3,165 3,411 - 86 -2.45% 2017/2018 70,785 76,597 111,477 100,395	TO DATE 2018/2019 18,065 19,354 28,412 25,774	FORECAST 2018/2019 69,684 76,014 111,121 100,656	0 32 - 133 164 Ann Change Tonnes 1,101 583 356 261	0.00% -2.00% -13.00% 0.00% -4.19% -4.82%  Change Percent -1.55% -0.76% -0.32% 0.26%	2018/2019 Budget Tonnes 71,187 76,840 112,125 100,522	0 25 - 199 - 224  Bud Change Tonnes - 1,503 - 826 - 1,004 134	0.00% 3.88% -10.53% 0.00% -6.15% -6.45%  Change Percent -2.11% -1.08% -0.90% 0.13%
<b>Percentage Change</b> 0.13% -0.75% -2.13% -0.77%	LA WA WRWA Total Change Percentag  Total Was  HF KC LA WA WRWA	456 - 2,860 3,316 ge Change ste Delivered (To 2014/2015 73,915 79,110 115,284 100,766 22,096	- 366 - 3,022 3,387 72 2.16% 2015/2016 74,234 79,068 114,046 102,539 21,778	273 - 3,223 3,496 109 3.21% 2016/2017 73,236 77,613 113,172 102,442 22,277	2017/2018 70,785 76,597 111,477 100,395 21,208	TO DATE 2018/2019 18,065 19,354 28,412 25,774 6,351	FORECAST 2018/2019 69,684 - 76,014 - 110,656 20,071 -	0 32 - 133 164 Ann Change Tonnes 1,101 583 356 261 1,137	0.00% -2.00% -13.00% 0.00% -4.19% -4.82%  Change Percent -1.55% -0.76% -0.32% 0.26% -5.36%	2018/2019 Budget Tonnes 71,187 76,840 112,125 100,522 21,833	Bud Change Tonnes - 1,503 - 826 - 1,004 134 - 1,762	0.00% 3.88% -10.53% 0.00% -6.15% -6.45%  Change Percent -2.11% -1.08% -0.90% 0.13% -8.07%
	LA WA WRWA Total Change Percentag  Total Was  HF KC LA WA WRWA Total	456 - 2,860 3,316 ge Change ste Delivered (To 2014/2015 73,915 79,110 115,284 100,766 22,096	- 366 - 3,022 3,387 72 2.16% 2015/2016 74,234 79,068 114,046 102,539 21,778 391,665	273 - 3,223 3,496 109 3.21% 2016/2017 73,236 77,613 113,172 102,442 22,277 388,741	2017/2018 70,785 76,597 111,477 100,395 21,208 380,462	TO DATE 2018/2019 18,065 19,354 28,412 25,774 6,351	FORECAST 2018/2019 69,684 - 76,014 - 111,121 - 100,656 20,071 - 377,546 -	0 32 - 133 164 Ann Change Tonnes 1,101 583 356 261 1,137	0.00% -2.00% -13.00% 0.00% -4.19% -4.82%  Change Percent -1.55% -0.76% -0.32% 0.26% -5.36%	2018/2019 Budget Tonnes 71,187 76,840 112,125 100,522 21,833	Bud Change Tonnes - 1,503 - 826 - 1,004 134 - 1,762	0.00% 3.88% -10.53% 0.00% -6.15% -6.45%  Change Percent -2.11% -1.08% -0.90% 0.13% -8.07%

Local Authority Collected	Forecast after	3 m	onths of	2018/2019	I	Printed	9/7/20	18 12:05		
Waste (Tonnes)		HF	кс	LA	WA	HWRC	Total	Share	Adjusted for Contamination	Share
Co-Mingled Recyclables		11,129	15,572	19,447	20,279	702	67,129	18%	58,088	15%
Detritus Waste		805	548	970	3,430	-	5,753	2%	5,753	2%
General Waste		57,503	59,299	89,381	76,478	9,359	292,020	77%	301,061	80%
Green Waste		130	484	449	277	3,228	4,568	1%	4,568	1%
Wood Waste		-	1	213	-	3,032	3,246	1%	3,246	1%
Other Waste		117	110	661	192	3,750	4,830	1%	4,830	1%
TOTAL WASTE		69,684	76,014	111,121	100,656	20,071	377,546	100%	377,546	100%
Co-Mingled Contamination		1,420	1,700	2,974	2,852	95	9,041			

Local Authority Collected Waste (£)	£/T	HF	кс	LA	WA	HWRC	Total	Share	Adjusted for Contamination	Share
Co-Mingled Recyclables	27.00	300,491	420,437	525,069	547,539	18,950	1,812,485	4%	1,812,485	4%
Detritus Waste	78.50	63,230	42,999	76,138	269,238	-	451,605	1%	451,605	1%
General Waste	147.50	8,481,695	8,746,576	13,183,710	11,280,545	1,380,482	43,073,009	93%	44,406,518	93%
Green Waste	88.00	11,413	42,596	39,545	24,376	284,050	401,980	1%	401,980	1%
Wood Waste	123.00	-	128	26,192	-	372,962	399,281	1%	399,281	1%
Other Waste		16,790	6,140	4,658	43,792	12,696	84,075	0%	84,075	0%
SUB-TOTAL COST		9,083,046	9,509,694	14,293,906	12,586,098	2,083,202	46,222,436	100%	47,555,945	100%
Co-Mingled Contamination	147.50	209,426	250,817	438,594	420,609	14,064	1,333,509			
-					Т	OTAL COST	47,555,945			

Local Authority Collected Waste (Tonnes) Adjusted for Contamination						
	HF	KC	LA	WA	HWRC	WRWA
Co-Mingled Recyclables	9,709	13,871	16,473	17,428	607	58,088
Detritus Waste	805	548	970	3,430	-	5,753
General Waste	58,923	60,999	92,355	79,330	9,455	301,061
Green Waste	130	484	449	277	3,228	4,568
Wood Waste	-	1	213	-	3,032	3,246
Other Waste	117	110	661	192	3,750	4,830
TOTAL WASTE	69,684	76,014	111,121	100,656	20,071	377,546

Local Authority Collected Waste (Tonnes) Other Estimated Adjustments	HF	кс	LA	WA	HWRC	WRWA
HWRC Recycling Tonnage assigned to Councils Mixed Food & Garden Waste	2,003	2,478	2,772 4,500	3,363 -	10,616	4,500
Other Third Party Recycling	350	250	2050	500		3,150
TOTAL Local Authority Collected Waste	72,037	78,742	120,443	104,519	9,455	385,196

	Forecast after	3	Quarters of	2017/2018			
Household Waste Data							
from Waste DataFlow					* Allocated to Co	nsituent Councils	
		HF	КС	LA	WA	HWRC	WRWA
Residual Household Waste		36,854	38,634	59,943	75,091	9,455	219,977
HH Dry Recycling Tonnage		10,534	12,556	19,254	19,024	*	61,367
HH Compost Tonnage		913	1,350	6,023	2,010	*	10,296
Total Household Waste		48,301	52,540	85,220	96,125	9,455	291,641
HH Waste Sent for Recycling or (	Composting	11,447	13,906	25,277	21,034	*	71,664
Non-Household Residual Waste		22,069	22,365	32,411	4,239	-	81,084
Non-Household Recycling & Con	nposting	1,668	3,837	2,811	4,156	-	12,472
Total Non-Household Waste		23,737	26,202	35,223	8,395	-	93,556
Total Local Authority Collected \	Vaste	72,037	78,742	120,443	104,519	9,455	385,196

Demographics						
	HF	KC	LA	WA	HWRC	WRWA
Population	179,654	156,726	327,910	316,096	980,386	980,386
Number of Households	87,380	88,720	140,260	142,720	459,080	459,080
Persons per Household	2.06	1.77	2.34	2.21	2.14	2.14
HH Waste per HH (kg/week)	10.6	11.4	11.7	13.0	0.4	12.2
Residual HH Waste per HH (kg/week)	8.1	8.4	8.2	10.1	0.4	9.2
Recycled/Composted HH Waste per HH (kg/week)	2.5	3.0	3.5	2.8	*	3.0
HH Waste per Resident (kg/week)	5.2	6.4	5.0	5.8	0.2	5.7
Residual HH Waste per Resident (kg/week)	3.9	4.7	3.5	4.6	0.2	4.3
Recycled/Composted HH Waste per Resident (kg/week)	1.2	1.7	1.5	1.3	*	1.4

Recycling Performance						
	HF	KC	LA	WA	HWRC	WRWA
HH Dry Recycling %	21.8%	23.9%	22.6%	19.8%	*	21.0%
HH Compost %	1.9%	2.6%	7.1%	2.1%	*	3.5%
HH Recycling/composting %	23.7%	26.5%	29.7%	21.9%	*	24.6%
Municipal Recycling/composting %	18.2%	22.5%	23.3%	24.1%	*	21.8%

#### Schools taking part in the WRWA Education Programme 2017/8

\* New this year

#### Lambeth (26)

**Ashmole Primary** 

Corpus Christi

Crown Lane \*

**Granton Primary** 

**Henry Fawcett** 

Hitherfield

Immanuel and St Andrew

Igra VA school

Kennington park Academy\*

Larkhall primary

London Nautical School\* (Secondary)

Reay Primary School\*

St Andrews, Streatham

St Helens Primary School

St John the Divine\*

St Lukes Primary school\*

St Marks

St Saviours

St Stephen's Cof E

Streatham & Clapham Girls

Streatham Wells

Telferscot

**Woodmansterne Primary** 

**Wyvil Primary** 

#### Hammersmith and Fulham (21)

**Addison Primary** 

All Saints C of E

**Avonmore Primary** 

**Bayonne Nursery** 

**Fulham Primary** 

**Good Shepherd** 

James Lee Nursery

Langford Primary school

Larmenier and Sacred Heart\*

L'ecole des petits

London Oratory (Secondary)\*

Marie D'Orliac

Normandcroft

Parsons Green Prep

**Queens Manor** 

St Johns Walham Green\*

St Mary's

St Paul's Cof E

St Stephens

St. Peter's C of E Primary\*

West London Free School

# Royal Borough of Kensington and Chelsea (16)

**Bassett House** 

**Bousfield** 

Earls Court Primary\*

Eaton house

Hill House

KLC School of Design

**Knightsbridge School** 

Lion House

Lycee

**Norland Place** 

Southbank International

School

St Barnabas and St Phillips

St Cuthbert w St Matthias

St Josephs RC primary school

St Marys RC \*

**Thomas Jones** 

# Wandsworth (46)

Allfarthing

Ark Putney Academy\* (Secondary)

Belleville Wix\*

**Bonneville Primary** 

Brandlehow school\*

**Broadwater School** 

**Chesterton Primary** 

Crescent 1 Kindergarten

Crescent II Kindergarten

Dolphin school

Earlsfield primary

Falconbook\*

Fircroft

Floreat\*

Frances Barber PRU

Franciscan primary school

Furzedown

**Gatton Primary** 

**Granard Primary** 

**Griffin Primary** 

High View Primary School\*

Hillbrook Primary

Honeywell Junior School

Hotham School\*

John Burns

Mousehouse Nursery

Our Lady of Victories, Putney

Priory Lodge

**Ronald Ross** 

Rutherford House\*

**Sellincourt Primary** 

Southmead

St Boniface

St Josephs RC primary school

St Marys Putney

St Marys RC Battersea

St Stephen's C of E

Thames Christian College (S)

The Alton School

The Bumble Bee Nursery

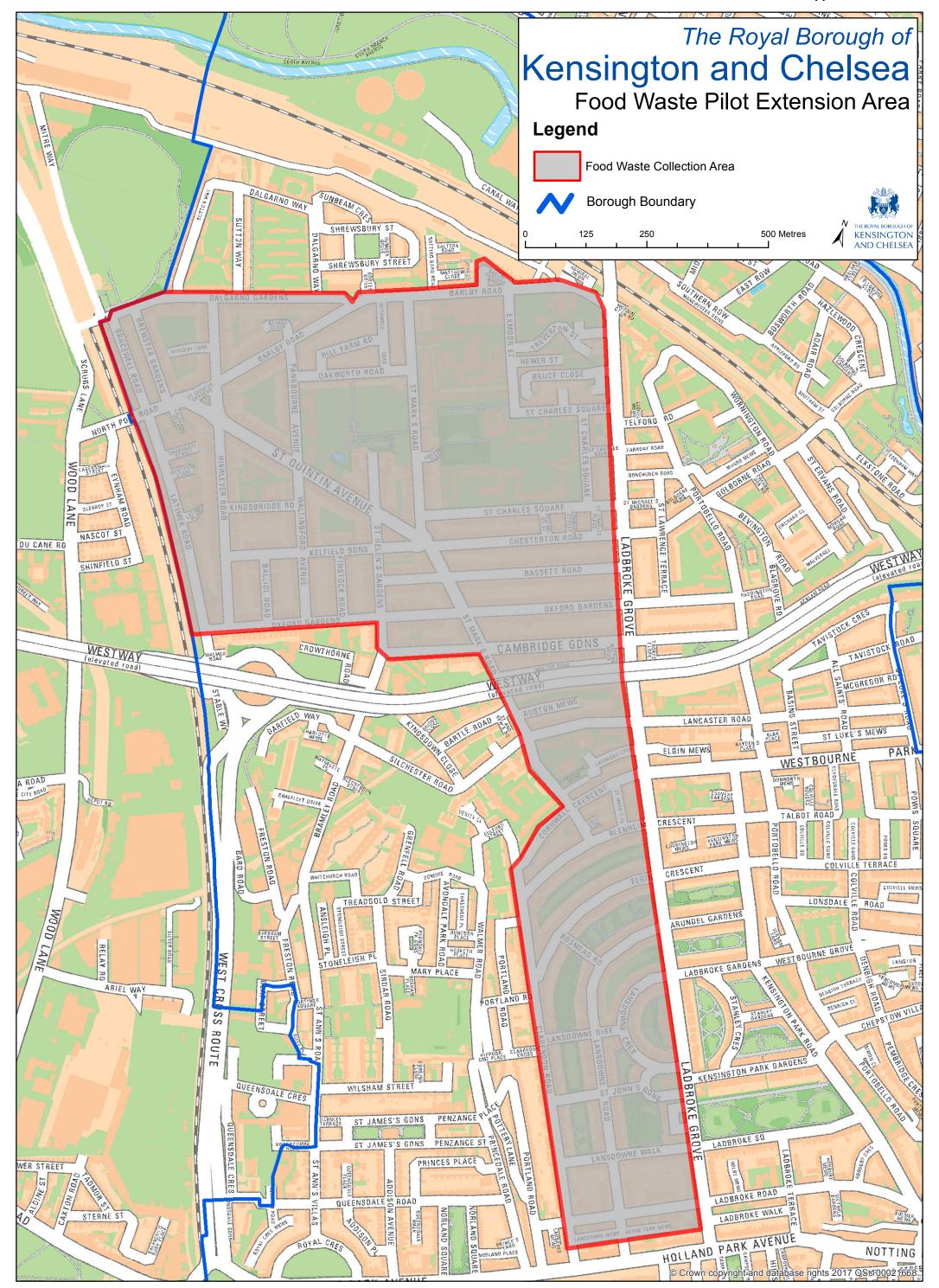
**Thomas Clapham** 

**Tooting Primary** 

Wandsworth Prep

West Hill

Wix





# Western Riverside Waste Authority

Chairman: Councillor Paul Warrick General Manager: Mark Broxup

Western Riverside Transfer Station, Smugglers Way, Wandsworth, LONDON SW18 1JS

Telephone: 020 8871 2788 E-Mail: <u>info@wrwa.gov.uk</u>

Web: www.wrwa.gov.uk

Contact: Mark Broxup

Direct Dial: 020 8875 8888

Date: 1<sup>st</sup> March 2018

Environment Committee, London Assembly, City Hall, The Queen's Walk, London SE1 2AA

Dear Ms. Cooper,

#### RE: THE ENVIRONMENT COMMITTEE'S REPORT "WASTE: ENERGY FROM WASTE"

I write because Western Riverside Waste Authority considers that the above report does not fully and clearly explain the strategic importance of EfW within London.

The report suggests that the increase in EfW over the last decade has discouraged waste minimisation and constrained recycling. This is not the case. Increased capacity of EfW in London is a direct result of reduced use of landfill. That more than half of London's waste no longer goes to landfill but is instead used to make electricity and heat, provide recycled metals and reduce the use of virgin aggregates, should be celebrated.

Ten years ago this Authority sent to landfill annually about 420,000 tonnes of residual waste. Today the figure is below 2,000 tonnes. Now we send 305,000 tonnes of residual waste to EfW: that is a 27% decrease in total residual waste handled each year.

There are no minimum tonnage or minimum payment provisions in this Authority's waste contracts, and thus no restraints or perverse incentives affecting its ability to reduce and recycle its waste. EfW is not a cheap option, it costs £150 per tonne. Dry recycling costs £25 per tonne, and a tonne minimised to zero costs us nothing. Believe me, this Authority is fully incentivised, financially and environmentally, to follow the waste hierarchy and prioritise recycling. It may be difficult and complex to increase recycling performance, but a per tonne saving of £125 is always in our minds.

Artificially limiting the use of EfW, or introducing an incineration tax, needs to be very carefully thought through. If waste authorities have to pay tax to HM Treasury there will be less to spend on recycling — and at a time when authorities are urged to meet a higher target which will cost more per tonne to reach.

The report suggests that residual waste could be recycled before incineration. Because of that £150 number this option has been tried many times, but the so-called "dirty MRFs" have consistently failed to produce a marketable recycled product. Looking ahead and noting China's recent import restrictions, my Authority doubts that this proposal will ever be viable.

Your report refers to anaerobic digestion, which we regard as another form of energy recovery. We have modelled and are right now trialling collection and transport of separated foods. These are early days and we have not yet identified environmental benefits, but we do expect increased cost. We have noted the possible increase in AD capacity in London and we keep an open mind.

For sound environmental reasons landfill capacity is disappearing. It is clear from your report that if London fails to meet the Mayor's 65% recycling target, which recent industry research suggests is unlikely to be met, or if Brexit prevents export to Europe of residual waste, London will probably experience a significant shortfall in treatment capacity.

I hope your Committee will take on board and highlight the points made in this letter, and I return to my first sentence – it is the strategic significance of EfW which is so important to London. We absolutely need not to run out of residual waste treatment capacity.

Yours sincerely,



# CLLR PAUL WARRICK CHAIRMAN

c.c All Members of the Environment Committee, London Assembly
Ian Williamson, Scrutiny Committee Manager
Clare Bryant, Committee Officer

#### Western Riverside Waste Authority's response to HM Treasury's Call for Evidence on:

"Tackling the plastic problem - Using the tax system or charges to address single-use plastic waste"

#### Introduction

This is an officer response. The Authority will formally consider this response at its meeting in July 2018 and details of any changes required will be forwarded to HM Treasury.

The Western Riverside Waste Authority was established in 1986 as an autonomous statutory local government body to undertake the waste disposal functions prescribed by the Local Government Act 1985 and the Waste Regulation and Disposal (Authorities) Order 1985 and is responsible for waste treatment on behalf of four London Boroughs; Hammersmith and Fulham, Lambeth, Wandsworth and the Royal Borough of Kensington and Chelsea.

#### **General Comment**

The key aims of any environmental policy are the minimisation of pollution, to protect flora and fauna, and the conservation of resources. The waste hierarchy has helped to simplify those aims by ordering and promoting waste management treatment methods that cause the least damage to the environment i.e. reduce, re-use, recycle, recover and finally disposal. The circular economy is a means of promoting and increasing the reduction and reuse components of the hierarchy.

Plastic performs many essential and valuable services for modern society, not least being the role that plastic packaging plays in the preservation of food. It's lightness also means that many modern goods are lighter than their traditional alternatives which brings environmental savings in terms of transport.

However, whilst the positive effects of plastics are many there are also many negatives. For example, contrary to the principle of waste minimisation, plastics have lead to an increase in convenience goods which did not exist previously (e.g. beverage cups and water bottles) also, the proliferation of different plastic types and how they are combined in products, and with other materials, has in many cases made the recycling of them impossible.

More seriously, when plastic products escape the waste management hierarchy, through littering or illegal dumping, we know that they cause terrible harm and suffering to fauna and, as they degrade slowly, the harm can persist for decades. Finally, when the plastic material does finally degrade into smaller particles we are now realising that it is entering our water and food supplies with, as yet, unknown consequences.

However defining the problem around Single-Use-Plastics seems to be the wrong starting point, particularly given that many single use plastics can be a better environmental option. The Authority believes the focus needs to be on minimising the unnecessary use of plastics, improving the ability to re-use and recycle what is produced and minimising the amount of material that escapes the waste hierarchy either through littering or illegal dumping.

#### **The Definition Of Single-Use Plastics**

# Q1) How should the government define single-use plastics, and what items should be included and excluded, and why?

Defining the problem around Single-Use-Plastics seems to be the wrong starting point given that, as the consultation document acknowledges, many single use plastics can be the best environmental option, unlikely to be over produced and unlikely to escape the waste hierarchy.

Waste minimisation, of any kind, is a priority but in the context of the consultation document, it seems that it is plastic material that sits outside the waste hierarchy, by either being littered or illegally dumped, is what needs to be addressed. The UK also needs to recognise, and address, the problem that exported low quality recyclable plastic material (or the less valuable elements of it) possess a high potential to be Illegally dumped in countries with less stringent environmental laws and/or enforcement regimes.

#### **Assessing single-use plastics**

# Q2) What are the most important problems associated with single-use plastics, and why?

As highlighted in the answer to Question 1, the Authority does not believe that the single-use element is the key issue.

The main problems seem to be caused by:

- a) goods and packaging that are simply designed for consumer convenience and are not designed to be readily re-used or recycled. Also how and where these materials are used can often mean that they are prone to be littered.
- b) many goods and packaging materials not lending themselves to be easily separated from the rest of the waste stream and often being made from a combination of materials that also cannot be readily separated for recycling.

For example, a plastic tomato ketchup bottle is a single use item but it is likely to be lighter than alternatives (with lower transportation costs, environmentally and economically) and, although not a readily re-useable item, it is relatively easy to recycle. Also, due to the manner and location in which it is used, it is less likely to escape the waste hierarchy and therefore unlikely to become a longer term environmental hazard.

Conversely, plastic bags are often used multiple times by consumers but are often over produced for consumer convenience and are difficult to recycle. Crucially, through the manner and locations in which they are used, they also pose a very high risk of being littered and consequently escaping the waste hierarchy.

Disposable coffee cups, water bottles and the "4/6 pack beer rings" are the epitome of the single-use plastic problem with their existence inspired primarily by consumer convenience. Evidence would also suggest that a large proportion of these items are prone to littering and the 4/6 pack beer ring is almost impossible to separate for recycling. Whilst coffee cups are more easily separated from the rest of the waste stream, if disposed of responsibly, they are difficult to recycle due to their being constructed from a number of different materials.

Consequently, the Authority believes that, rather than concentrating on the single-use element, the focus should be on incentivising waste prevention, the reuse of material where possible, the prevention of material leaving the waste hierarchy (particularly post-consumer material) and the true recycling of material.

Generally the Authority has no difficulty in finding outlets for PET and HDPE (Clear and Coloured) but outlets for plastic film (recycling sacks) and mixed plastics (generally pots, tubs and trays) can be problematic to source depending on market conditions.

Additionally, if processing methods are improved, to minimise the amount of the valuable PET and HDPE in the mixed plastic product this can cause it to became less attractive to the market. This highlights that there is a danger that, once the valuable component of the mixed plastic waste stream is removed, the remainder is simply disposed of and if low quality mixed plastics are exported to countries, with lower environmental regulation and/or enforcement, there is a real risk that material will be dumped illegally.

Non-market related practical barriers to plastics recycling include:

- the number of different polymer types and how they are combined in products;
- the original use of the product i.e. the recycling of pots, tubs and trays brings a lot of associated food waste it.
- convenience not only influences consumer purchasing but it also affects how the public will recycle. In urban areas, co-mingled recycling significantly increases public participation and capture rates and the material is then separated in Material Recycling Facilities (MRFs). MRFs will generally mechanically sort 3D materials i.e. bottles, cans, pots, tubs and trays from 2D materials i.e. fibre products such as paper and card. The 3D material is then further broken down by the use advanced sorting techniques. Therefore a plastic bottle which is 3D in shape will be sorted correctly but a 2D sheet, of the same plastic, will simply end up contaminating the fibre line.
- Plastics are light, this is one of their key strengths. However, in terms of a weight-based recycling target, this is a disadvantage.

These points simply emphasises the need for real producer responsibility in this area. It is the packaging and retail sectors that design, construct and supply the goods and packaging the public consumes. Often the design doesn't bring any benefit other than convenience to the consumer but that convenience is often associated with a "use-and-throw-away" culture. If producers and retailers want to increase trade by offering customer convenience they should also be responsible for the post-consumer impact of their products.

New packaging and goods doesn't just simply appear, they take years in design and then years to construct the factories that build and use the products. Producers and retailers should be required to demonstrate in that time how the material will be recovered post-consumer and subsequently reused or recycled. Targets and taxation in this area need to be focussed on the producers, in line with the 'producer pays' principle - not local authorities as is the case currently.

# Q3 Are there more environmentally friendly alternatives, currently available or possible in the future, to these types of single-use plastic items or their manufacturing processes, and can they still offer similar benefits?

Generally this question is not within the Authority's area of expertise. However, the government has asked if it should encourage biodegradability in plastics, and if so, how?

However, the Authority notes the comments made in the <u>European Union Commission's plastics</u> <u>strategy</u>, launched on 16<sup>th</sup> January 2008, which warns that biodegradable and compostable plastics could lead to greater littering and compromise recycled material streams unless they are clearly labelled. The Authority's experience would also suggest that, in reality, labelling will not be able to achieve this and the public will not effectively distinguish between different plastic types in this way.

The Authority also notes the 2015 United Nations report that states that <u>biodegradable plastics are</u> not the answer to reducing marine litter.

# Q4 Are there single-use plastic items that are deemed essential by their nature or application, which cannot be substituted or avoided?

This question is not within the Authority's area of expertise.

#### **Production**

**Q5)** to **Q7)** These questions are not within the Authority's area of expertise.

#### Retail

**Q9) to Q11)** These questions are not within the Authority's area of expertise.

# **Consumption**

#### Q13 What factors influence consumers' choices related to single-use plastic items?

Consumers generally have very little choice over how they purchase goods and, if there is a choice, they will naturally go for the most convenient option offered. There is very little, if any, real difference between how major retailers package their goods or offer them for sale.

The 5p plastic bag charge has shown that consumers broadly support taxes levied on environmentally-damaging items, and research suggests that it has been successful in changing behaviour in this regard.

Generally, imposing new charges seem better at influencing behaviour change on convenience items as opposed to offering discounts on existing charges. The logic being that the individual has budgeted for the current cost and will not sacrifice convenience for the saving but will consider doing so to avoid an additional cost.

The Authority believes that a Deposit Return Scheme would be effective in both increasing recycling and reducing residual waste tonnages. The Authority does not believe that this will drive behaviour

change in convenience, "on the go" products (such as small water bottles) but will help change behaviour in the household. It may also help change behaviour around how the public is motivated to reduce or voluntarily clear up litter.

The Authority believes that although a DRS may produce a small reduction in recyclable income for local authorities that loss (if any) will be more than compensated for by a decrease in residual waste treatment costs and a net saving will result for the tax payer in unitary authorities and across two-tier waste authority areas.

Q14 and Q15 These questions are not within the Authority's area of expertise

#### Discarding and waste treatment

# Q17 What are the barriers to the collection of single-use plastics and more environmentally friendly methods of waste treatment, including barriers to any existing technologies?

Many plastics are unable to be recycled via current technologies, are impossible to separate from one another or from the waste stream as a whole. A lot of this material is put directly into the residual waste stream or ends up their during the sorting process at a MRF. Polystyrene is a good example.

Local authorities cannot be expected to continue to be reactive to the problems that producers i.e. manufacturers, importers and retailers create. Producers, not local authorities, must become responsible for firstly recovering the material they put into the market, post the consumer, and then designing it such that it can be easily reused or recycled.

# Q8, Q12, Q16 & Q18 In your opinion, how can the tax system or charges play a role in delivering better environmental outcomes at this stage?

The tax system could be used in a number of ways to help achieve better environmental outcomes.

- Tax products by the amount of virgin materials they contain. This would encourage waste minimisation and incentivise products to become more re-usable where possible. It would also help create an increase in demand for recycled material.
- 2) As well as giving producers (i.e. manufacturers, importers and retailers) overall targets for re-use and recycling, create targets, and associated penalties, for producers to recover plastic from the waste stream i.e. for it to be managed within the waste hierarchy and not lost in the form of litter.
- 3) Introduce an additional tax on products that are known to be the principle components of litter (see the <u>Incpen report</u> on litter composition in England).

- 4) Tax exports of low value recyclable material so as to encourage recycling locally and to avoid residual material simply being dumped in other countries with lower regulatory or enforcement regimes.
- 5) Introduce a Deposit Return Scheme for plastic, metal and glass bottles, cans and jars to encourage consumers to deal with their waste responsibly.

Whilst local authorities would have a role in assisting producers in achieving their targets the overall effect would be to reduce the costs of waste management for local authorities.

The increased tax revenue could also be used to support increased reuse or recycling or to ameliorate the negative effects that plastics cause when they escape the waste hierarchy and cause harm and suffering to flora and fauna.

# **Privacy Policy**

This privacy policy covers WRWA's treatment of personally identifiable information that we collect when you are register on this website, when you submit information, when you request information and when you visit our webpages. We will not share that information with any third party.

Our website - wrwa.gov.uk - contains links to other related sites that may be of use. However, this privacy statement only applies to information collected on this website. We are not responsible for the content or privacy policies of third party websites that may be linked to or from our pages.

wrwa.gov.uk also automatically receives and records information on our server logs from your browser including your IP address, cookie information and the page you requested. We use the information for the following general purposes: to fulfil your requests for certain areas of the website, and to contact you if needed or requested; and to help us monitor use of the website and the impact of any campaigns.

This policy gives you information on how WRWA collects and processes your personal data, what we do with your personal data and what legal rights are available to you.

We reserve the right to amend this Data Privacy Policy without Prior Notice.

## **HOW WE USE YOUR DATA – link to new page (text below)**

Notwithstanding the exception below, WRWA does not share your personal data with third parties except to comply with legal obligations, to exercise our legal rights (i.e. court cases); for the prevention, detection, investigation of crime or prosecution of offenders; and for the protection of our employees and contractors.

The exception would be an instance whereby you have sent a request or complaint to the Authority that should have been directed to your local council e.g. a complaint concerning missed waste collections.

### WHAT PERSONAL INFORMATION WE COLLECT - - link to new page (text below)

WRWA may collect the following information from you:

Name and Contact details (Address/Tel. Numbers (including mobile) and email address, the number of times you have used our services and your correspondence and communications with WRWA

# **HOW WE PROTECT YOUR DATA - - link to new page (text below)**

Your personal data is supplied to us though controlled processes that are protected through appropriate measures, including encryptions. Our service provider only permits access to your data, following audit and access logging, and is restricted based on business need. The Authority ensures our employees are conversant with and comply with our data security approach.

### **HOW LONG DO WE KEEP YOUR DATA – link to new page (text below)**

WRWA will not retain personal data for longer than necessary for the purposes we collected if for, including for the purposes of satisfying any accounting or reporting requirements. The longest we will normally hold any personal data is 6 years. We will ensure that we have regular reviews of the information we hold and ensure deletion of personal data that we no longer use.

# YOUR RIGHTS RELATING TO YOUR PERSONAL DATA - - link to new page (text below)

You have the following rights:

- 1. The right to ask for a copy of personal data that we hold about you (the right of access);
- 2. The right (in certain circumstances) to request that we delete personal data held on you; where we no longer have any legal reason to retain it (the right of erasure or to be forgotten);
- 3. The right to ask us to update and correct any out-of-date or incorrect personal data that we hold about you (the right of rectification);
- 4. The right to opt out of any marketing communications that we may send you and to object to us using / holding your personal data if we have no legitimate reasons to do so (the right to object);
- 5. The right (in certain circumstances) to ask us to 'restrict processing of data'; which means that we would need to secure and retain the data for your benefit but not otherwise use it (the right to restrict processing); and
- 6. The right (in certain circumstances) to ask us to supply you with some of the personal data we hold about you in a structured machine-readable format and/or to provide a copy of the data in such a format to another organisation (the right to data portability).
- 7. The right to be provided with information about how your personal data is processed (the right to be informed)
- 8. The right to be provided with information about the processing of any automated decision making and profiling and to request human intervention or challenge a decision.

Appendix F

If you wish to exercise any of the above rights, please contact us using the contact

details set out below:

Telephone: 020 8871 2788

Write to: Data Protection Officer, WRWA, Smugglers Way, Wandsworth, SW18 1JS

Email: info@wrwa.gov.uk

You will not be charged a fee if you make a subject access request.

We will endeavour to respond to your request within one month of receipt.

LEGAL BASIS FOR USING DATA - - link to new page (text below)

We are required to set out the legal basis for our processing of personal data. The Authority has three bases for its data processing activities:

Legal Obligation - a requirement to comply with the law

Public Task - processing to perform a task in the public interest

Legitimate Interest - processing for a legitimate reason other than performing our tasks as

a public authority.

DATA PROTECTION OFFICER – link to new page (text below)

We have appointed a Data Protection Officer to ensure we protect the personal data of those who use our services and those who contact us and to ensure we comply with data

protection legislation.

If you have any questions about how WRWA use your personal data that are not answered here, or if you want to exercise your rights regarding your personal data, please contact our

Data Protection Officer using the details set out below:

**Contact Details** 

Postal Address:

Data Protection Officer, WRWA, Smugglers Way, Wandsworth LONDON SW18 1JS

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or

Email: info@wrwa.gov.uk

Telephone: 020 8871 2788

You also have the right to lodge a complaint with the Information Commissioner's Office (ICO), the UK supervisory authority for data protection issues. Contact details, can be found at https://ico.org.uk