Committee(s):	Date(s):
Port Health and Environmental Services	16 September 2014
Subject: Comingled Dry Mixed Recycling Contamination	Public
Report of: Director of Transportation and Public Realm	For Information

Summary

This report sets out the steady increase in recycling rates in the City over recent years. It advises that our approach to awarding disposal contracts every 2 years has been successful in obtaining a very competitive price for our comingled Dry Mixed Recycling (DMR) which is processed via a Material Recycling Facility (MRF).

However it is now necessary to retender the agreement and the service is facing both a worsening in the market for comingled DMR and a previously unexperienced level of contamination of the material. This contamination has recently resulted in waste having to be taken for disposal rather than treatment at a MRF and the report explains that Officers are currently urgently reviewing the various waste streams to establish the cause for this contamination and how it might best be rectified.

Recommendation(s)

Members are asked to:

• Note the report and agree to receive a further report once investigation into the causes of contamination of recycled waste has been completed.

<u>Main Report</u>

Background

- 1. The City of London has steadily improved its recycling rate in recent years from 16% in 2005/06 to 36% for 2012/13 and 39% for 2013/2014.
- 2. This increase in recycling rate has been a result of the introduction of services from including basic comingled DMR (2005), textiles (2007), food waste (2009), Waste Electronic and Electrical Equipment (2011), batteries and light bulbs on estates (2013) with this service being expanded further to private blocks in 2014. Additionally the City of London Recycling team have carried out regular recycling roadshows on City estates, communication campaigns and attended various community events to promote and advise on the recycling service.
- 3. The City's recycling rate compares favourably (Appendix A) with Inner London Boroughs of similar housing stock of flats and high rise properties.
- 4. At the PHES Committee in September 2013, Members approved a revised City of London Corporation's Waste Strategy document which places greater focus on reuse and recycling. Contained within this revised waste strategy was the target to achieve a 45% recycling rate by 2015 and 50% by 2020,

which aligns with the Mayor of London's 2011 Strategy "London's Wasted Resource".

5. Currently the City of London sends its comingled Dry Mixed Recycling (DMR) to a Materials Recycling Facility (MRF) operated by Ideal Waste Ltd, where it is sorted into individual recyclable material streams, ready for onward processing. The City's arrangement with Ideal Waste was fixed for two years through a Memorandum of Understanding (MOU) that expires on the 31 October 2014. Given the volatility of the market the City's strategy has been to enter this type of short term arrangement which, over recent years, has seen us benefit from an income from our comingled DMR unlike many London Authorities that entered long term contracts with gate fees of up to £70 per tonne or more. Ideal Waste regularly samples our comingled DMR and to date the quality of our recycled material has generally met their contamination requirements, varying between 5 and 10% with low levels of rejection. However recent sampling has shown significantly higher contamination rates, as high as 57% for household recycling and 21% for street sweeper recycling. A sample of Renew on-street recycling was rejected by Cory, as being so contaminated it was classified as general waste for incineration.

Current Position

- 6. As the contract with Ideal Waste expires at the end of October 2014 the Cleansing Service are currently going through the procurement process to find the MRF which offers best value for money (in accordance with Objective 9 of the aforementioned revised Waste Strategy). We will also aim to meet the requirements of the new MRF Code of Practice, this comes into effect on the 01 October 2014 and requires all MRFs processing over 1000 tonnes of comingled DMR per year to be permitted by the Environment Agency. Permits will be awarded based on both the quality of input and output from the MRF.
- 7. As part of our procurement process we have sent sample loads of comingled DMR to two other MRF operators, Cory Environmental and Veolia. This sampling was done at the MRF operators request to enable them to ensure that the waste treated by their facilities will meet the new standards dictated by the MRF Code of Practice. They have confirmed that our comingled DMR is currently experiencing high contamination levels.

Investigating the problem

- 8. The City's comingled DMR comes from three sources, domestic household recycling, on-street recycling from Renew on-street recycling bins and litter collected by manual street sweepers. Sample loads are being separated into these three separate recycling sources, enabling officers to identify the general sources of contamination. Additionally the recycling team have carried out some initial waste composition audits to verify the MRF sampling and identify specific contamination levels for each source. This has confirmed that contamination levels can on occasion be too high to enable processing.
- 9. To date the Recycling Team have inspected dedicated loads of comingled DMR (from the Barbican Estate, the 20 most used Renew on-street recycling bins, and a random sample of 10 sweeper barrows). The results from these waste audits have enabled officers to identify where targeted communication can improve householders' awareness of the contamination of recyclables, the need for improved design and signage on the Renew on-street recycling

bins and where further training is required for Amey staff to ensure street cleansing and waste collection operatives only collect the required materials. The action taken to address this contamination from each source is detailed below and in the table in Appendix B.

Household recycling

10. The basic waste audit of household comingled DMR identified contamination issues caused by residents disposing of non-recyclable items in their recycling bags and commercial waste being placed in the communal household recycling containers. There is a possibility that porters and cleaners have also been inadvertently using the incorrect containers to dispose of residents waste and that some residents on some estates are using the recycling bags (supplied free of charge by the City) to dispose of their general waste, (which, with the exception of Barbican, we do not provide free bags for). This incorrectly bagged waste is then being deposited into the estates communal recycling bins and contaminating the household comingled DMR waste stream.

Renew on-street recycling bins

- 11. Of the three waste sources which make up the comingled DMR this waste source is the most difficult to control contamination levels as this can only be done by changing public behaviour and facilitating correct use of the bins through effective signage, good design and perhaps the provision of general waste bin options.
- 12. The current signage, provided by Renew, on the bins is discreet and ineffective and as a result the public are using the bins for general, non-recyclable waste. Until recently the City of London has been unable to apply more prominent signage to the on-street recycling bin due to the requirements of the contract for the Renew bins. However, the owners of the recycling bins have gone into administration and the City of London now has permission from the administrator to apply more effective signage.
- 13. Officers are currently in discussion with the Administrator to establish how best this problem may be resolved and whether the current bin provision remains a cost effective method of collecting recyclable material. It is anticipated the results of these discussions will be reported at this committee's next meeting.

Recycling collected in sweeper barrows

- 14. Although this source of recyclable waste contributes the smallest amount to the City of London's comingled DMR stream, it is the source over which we have the most control of the quality of the recycling collected.
- 15. However, samples of sweeper collected recycling has also been rejected by the MRFs owing to its poor quality. Recycling collected in the sweeper barrows should have a near zero contamination rate as this is manually sorted by the street sweeper.

Next steps

16. Appendix B sets out the comingled DMR Contamination Action Plan which details the measures to be taken to reduce contamination in the three sources which collectively make up the comingled DMR stream.

17. In addition to dealing with the contamination issues as detailed in the DMR Contamination Action Plan, there will be on-going engagement and communication to maintain and increase participation in the City's recycling schemes. Officers will continue to engage and communicate with residents and the public via promotional recycling campaigns, increasing recycling service provision, and also run waste minimisation campaigns (such as No Junk Mail and Love Food Hate Waste and the City's recycling roadshows).

Financial Implications

- 18. The Cleansing local risk budget has provision for the extra cost of recycling comingled DMR where it is estimated costs could be in the region of £50k per annum as opposed to the current contract in which materials attracted a modest income. However if the contamination rate is not resolved disposal costs are likely to significantly exceed the available budget. Officers detailed projections will be reported within the next report to this committee.
- 19. Whilst the City's MOU with Ideal Waste expires on 31 October 2014 we are able to continue processing our comingled DMR through their MRF on a month by month agreement until the contamination issue is resolved and a new MRF contract agreed. However, this will be subject to Ideal Waste Ltd MRF receiving the necessary permit under the new MRF Code of Practice.
- 20. In the meantime Officers will be seeking to reduce contamination levels and inviting expressions of interest from MRF providers with a view to obtaining the most economically advantageous arrangement for the City Corporate & Strategic Implications
- 21. This supports the City's Corporate Plan Key Policy Priority, KPP2 Maintaining the quality of our public services whilst reducing our expenditure and improving our efficiency.

Implications and Conclusions

- 22. Current costs for the disposal of rejected loads are significant at £118 per tonne as opposed to what we expect to be in the region of £40-£50per tonne if processed for recycling. If the contamination issues are not addressed the City could face a significant additional cost for the approximately 1400 tonnes of comingled recycling currently processed per annum.
- 23. The City's current recycling rate is 39% and this will be decrease significantly if current contamination levels cannot be reduced.

Appendices

- Appendix A: Inner London Borough Overall Recycling Rates 2012/13
- Appendix B: Comingled DMR Contamination Action Plan

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Appendix A - Inner London Borough Overall Recycling Rates 2012/13

Local Authority	% Recycling Rate
City of London	36.41%
Islington LB	31.43%
Camden LB	30.91%
Southwark LB	30.38%
Tower Hamlets LB	27.65%
R.B. Kensington and Chelsea	26.44%
Hackney LB	24.32%
Lambeth LB	22.76%
Westminster City Council	21.70%
Newham LB	21.04%
Lewisham LB	20.03%

Co-mingled recycling source	Likely cause of contamination	Actions to be taken
non-recyclable ite into recycling bag	Residents placing non-recyclable items into recycling bags	• Doorstep contamination monitoring on Estates to enable targeted communication with relevant properties, in addition to Estate wide recycling campaigns.
		 Waste audit on selected private blocks to identify main contaminants and information needs of porters.
		 Identify training needs of porters to enable effective identification of contaminants within recycling containers and how to deal with contaminated containers.
		 Create contamination stickers for contaminated recycling bag and leaflets to go through the letterbox to inform residents of the problem. To be applied by porters at point of collection.
		 Devise City-wide communication campaign to raise awareness of the impact of recycling contamination.
		 Trial the provision of general waste bags to all properties, in addition to recycling bags, would reduce contamination levels
		 If common contaminants are present across the City, investigate possibility of introducing new services to residents which remove common contaminants from comingled recycling service.
	waste entering into	 Identify sources of business/catering waste. Liaise with Enforcement team to enable legislation to be enforced.
		 Provide 'toolbox talk' to Amey waste collection operatives to undertake visual inspection of recycling bins and remove any easily movable items from the bins (e.g. catering trays) prior to emptying if safe to do so.

Renew bin recycling Public placing non- recyclable items or contaminating materials into Renew recycling bins	 Produce prominent and effective signage to be applied to Renew bins to better promote accepted materials 	
		 Undertake regular waste analysis on the 20 most frequently collected Renew bins to assess contamination levels and the effectiveness of the signage on the bins
		Trial different aperture types to restrict what can be put in the bin.
	 Distribute oyster-card holders promoting materials collected in the Renew recycling bins. 	
	 Investigate the actions of other Local Authority with on-street recycling bins to reduce contamination levels. 	
	 Review removing the bins and ceasing on street recycling 	
recycling not app Me dep rec the con bar cor	Amey street sweeper not sorting waste appropriately	• 'Toolbox talks', with pictorial messages, to remind operatives of the recyclable items to be placed in the compartment of their barrow.
		 Undertake regular random waste audits on recycling compartments of sweeper barrow and feedback to Amey on commonly collected contaminants to enable effective supervision and training of sweepers.
	Members of public depositing non- recyclable items in the recycling compartment of the barrow, contaminating the load	 Instruct sweepers to close the recycling compartment lid when barrow is unattended to prevent contamination by the public.
		 Create recycling signage to be applied to the sweeper's barrows.