



**Improving Recycling Rates in Flats – Proposal to Seek Surrey Waste Partnership Match Funding**  
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**Date: 20<sup>th</sup> September 2018**

## **1. Background**

- 1.1 The Surrey Waste Partnership (SWP) Members' Group agreed at their last meeting to make the flats recycling team a permanent part of the SWP to provide ongoing support to rollout services to flats and improve recycling performance at other hard to reach properties.
- 1.2 Based on the success that the team's work has had so far, the SWP agreed to provide up to £700k of match funding towards the capital costs for bins and communication materials, for the following activities, in ranked priority order:
1. Expanding food waste services to all flats and HMOs.
  2. Expanding dry mixed recycling (DMR) services to all flats and HMOs.
  3. Reducing DMR contamination.
  4. Expanding textiles and small electricals services to flats and HMOs.
- 1.3 The ranked priority order was determined based on the anticipated benefit of each activity in terms of increasing recycling rates and tonnage capture.
- 1.4 The partnership will be inviting all authorities to submit an expression of interest by the end of December, so that the match funding can be allocated between authorities and the delivery of the work can be planned, with work starting from April 2019.
- 1.5 To prepare an expression of interest for JWS, this paper sets out a proposal for discussion and the estimated business case for each activity.

## **2. Expanding food waste services to all flats**

- 2.1 Table 1 shows the current approximate coverage of food waste services to flats across the JWS areas. This shows there is significant potential to increase the provision of food waste collections to around 12,900 households.

Area	% coverage	No. flats <b>with</b> service	No. of flats <b>without</b> service
Elmbridge	40%	5,135	7,703
Mole Valley	80%	5,710	1,427
Surrey Heath	33%	1,819	3,694
Woking	99%	9,885	100

Table 1: Approximate coverage of food waste collection services at flats

- 2.2 From the trials that the flats team have undertaken three different container options have been identified, the cost of each option and the estimated benefit from rolling out a food collection service to all remaining flats is shown in annex 1.
- 2.3 Option 1 involves using food housing units so residents don't have to touch the bin and odours are more contained (see image in annex 2). However, these units are costly.

- 2.3 Option 2 is a 'lid in lid' bin, where a wheeled bin has a locked lid and residents have a smaller aperture to open to put in their food waste (see annex 2). This option is much more cost effective and achieves a similar experience for residents.
- 2.4 The third option is to use standard 140 litre wheeled bins, as are mostly commonly used across the JWS areas. However, when opening the lids of these bins residents can see the food waste and be subjected to odours and the waste is not kept secure. An unpleasant experience for residents could discourage use, thereby reducing the amount of food waste that is recycled.
- 2.5 Recommendation – based on the cost and resident experience it is proposed that option 2 is favoured, using 'lid in lid' bins. The capital cost is predicted to be paid back in one year.
- 2.6 However, the annual benefit of expanding food services, is anticipated to be around £35,000 from the current SWP financial mechanism, but this would not cover the additional collection costs that Amey would charge under the current pricing schedule, of around £113,000 (£8.74 per household). Therefore the benefit of providing a universal service to all residents that would increase recycling rates and bring in around 1,200 additional tonnes of recycling should be considered alongside the investment required.
- 2.7 Amey's ability to deliver the service to the additional households should also be considered and a rollout should only go ahead once there is confidence that an effective collection service can be provided.

### 3. Expanding DMR to all flats

- 3.1 There is much greater coverage of DMR collection services to flats within the JWS area, as shown in table 2, with only around 350 flats without a service.

Area	% coverage	No. flats <b>with</b> service	No. of flats <b>without</b> service
Elmbridge	99%	12,710	128
Mole Valley	99%	7,066	71
Surrey Heath	99%	5,458	55
Woking	99%	9,885	100

Table 2: Approximate coverage of DMR collection services at flats

- 3.2 Annex 3 summarises the business case for expanding DMR services to all flats. The capital cost is anticipated to be around £9,000 which would be paid back in three years and the annual income benefit is anticipated to be higher than the collection cost.
- 3.3 Recommendation – that DMR services should be rolled out wherever possible, however as there are only a limited number of properties without a service and therefore the scope for delivering benefit is small, this should not be a high priority. It should also be recognised that there are likely to be reasons why services haven't been introduced at these properties, such as lack of bin store space and it may take more time to work with housing provides or managing agents to find appropriate solutions.

#### 4. Reducing DMR contamination

- 4.1 Through the trials that the flats team have carried out so far they have found successful methods to reduce contamination in DMR bins by introducing restricted aperture lids, improving signage and providing residents with reusable recycling bags to store and transport their recycling. On average this has reduced the number of contaminated bins from 21% to 9%, increasing the proportion of bins that can be emptied by recycling vehicles and increasing material quality.
- 4.2 Annex 4 summarises the business case for delivering this same intervention to flats within JWS where there are currently no restricted aperture lids – all of Elmbridge, Mole Valley, Surrey Heath and half of Woking’s recycling bins.
- 4.3 There are two options. The first is to replace existing plastic bins with new metal bins and restricted aperture lids. Mole Valley currently have all metal bins, so in this area only new lids would be needed. But this option is costly, with a capital cost payback period of 11 years.
- 4.4 The second option is to modify the lids of existing plastic bins to a design that was produced and tested by the flats team in conjunction with JWS colleagues (see Annex 5). The lids need to be modified because reduced aperture lids for plastic bins aren’t currently available on the market. This option is much cheaper and would payback in three years with an anticipated annual benefit of £32,000 and no additional collection costs.
- 4.5 Recommendation – to pursue the second option of modifying existing bin lids due to the lower cost. This would also avoid disposing of plastic bins that are not at the end of their useful life. When plastic bins do come to the end of their life, and for new developments, it is recommended that 1280 litre metal bins with restricted aperture lids are bought as standard as they perform the best, but the cost of wholesale replacement now would be prohibitive.
- 4.6 It is recommended that work to reduce DMR contamination is prioritised as it is expected to bring the greatest benefit and can be rolled out without a dependency on Amey amending their collection rounds.

#### 5. Expanding textiles and small electricals to all flats

- 5.1 There is only limited coverage of textiles and small electrical collections at flats, as shown in table 3, with the potential to roll out a service to nearly 32,000 households.

Area	% coverage	No. flats <b>with</b> service	No. of flats <b>without</b> service
Elmbridge	0%	0	12,838
Mole Valley	0%	0	7,137
Surrey Heath	5%	276	5,237
Woking	35%	3,495	6,490

Table 3: Approximate coverage of textiles and small electricals services at flats

- 5.2 Annex 6 shows the business case and annex 7 shows the two container options. Option 1 is to use metal sackholders, as are currently used in Woking, whereas option 2 is a cheaper option designed by the flats team and JWS colleagues to utilise existing excess 140 litre bin stocks.

- 5.7 Recommendation – to pursue option 2 of modifying 140 litre bins as this option is less than half the cost with capital payback expected in only a year. Annual benefits are anticipated to be significant, around £45,000 compared to an annual collection cost of £14,000. The benefits for these materials are higher due to the income that can be gained from selling textiles.
- 5.8 However, it should be noted that rolling out textiles and small electrical collections to flats will require Amey to provide an effective collection method to do so. It is suggested that work starts by rolling out the service to flats where there are currently issues with textiles and electricals contaminating the DMR bins.

## **6. Summary and next steps**

- 6.1 Members are invited to discuss the recommendations and agree the work for which match funding will be sought from the Surrey Waste Partnership.
- 6.2 Members are also invited to discuss how the JWS/district and borough contribution could be funded, including the option of using funds from contract deductions.
- 6.3 To summarise, the recommendations are as follows:

For JWS to consider funding and requesting match funding from the SWP to:

- i. Reduce DMR contamination by modifying existing bin lids (or replacing bin lids in Mole Valley).
- ii. Expand textiles and small electrical services to all flats, using modified 140 litre bins, subject to agreeing a satisfactory collection approach with Amey.
- iii. Expand food services to all flats, if it is felt that the investment required is acceptable.
- iv. Expand DMR services to all flats, wherever possible.

### Annex 1 – Business case for expanding food to all flats

Container option	Area	Capital cost to JWS	SWP match funding	Annual additional collection costs	Annual JWS benefit	JWS capital payback (years)	Annual taxpayer benefit	Taxpayer capital payback (years)
Option 1 - Housing unit	Elmbridge	£88,012	£87,504	£67,322	£20,739	4	£51,848	3
	Mole Valley	£16,327	£16,233	£12,475	£2,792	6	£6,980	5
	Surrey Heath	£42,204	£41,961	£32,283	£10,882	4	£27,206	3
	Woking	£1,141	£1,134	£873	£256	4	£641	4
	<b>Total</b>	<b>£147,685</b>	<b>£146,832</b>	<b>£112,954</b>	<b>£34,670</b>	<b>4</b>	<b>£86,675</b>	<b>3</b>
Option 2 – Lid in lid bins	Elmbridge	£19,746	£19,238	£67,322	£20,739	1	£51,848	1
	Mole Valley	£3,659	£3,565	£12,475	£2,792	1	£6,980	1
	Surrey Heath	£9,469	£9,225	£32,283	£10,882	1	£27,206	1
	Woking	£256	£249	£873	£256	1	£641	1
	<b>Total</b>	<b>£33,130</b>	<b>£32,277</b>	<b>£112,954</b>	<b>£34,670</b>	<b>1</b>	<b>£86,675</b>	<b>1</b>
Option 3 – Standard 140 litre bins	Elmbridge	£14,162	£13,653	£67,322	£20,739	1	£51,848	1
	Mole Valley	£2,624	£2,530	£12,475	£2,792	1	£6,980	1
	Surrey Heath	£5,313	£5,070	£32,283	£10,882	0	£27,206	0
	Woking	£184	£177	£873	£256	1	£641	1
	<b>Total</b>	<b>£22,283</b>	<b>£21,430</b>	<b>£112,954</b>	<b>£34,670</b>	<b>1</b>	<b>£86,675</b>	<b>1</b>

## Annex 2 – Food waste container examples

Housing unit



'Lid in lid' bin



### Annex 3 – Business case for expanding DMR to all flats

Container	Area	Capital cost to JWS	SWP match funding	Annual additional collection costs	Annual JWS benefit	JWS capital payback (years)	Annual taxpayer benefit	Taxpayer capital payback (years)
1280 litre metal bins with reduced aperture	Elmbridge	£3,351	£3,323	£986	£1,117	3	£2,792	2
	Mole Valley	£1,863	£1,847	£548	£587	3	£1,468	3
	Surrey Heath	£1,439	£1,427	£423	£514	3	£1,286	2
	Woking	£2,606	£2,584	£767	£816	3	£2,041	3
	<b>Total</b>	<b>£9,260</b>	<b>£9,182</b>	<b>£2,724</b>	<b>£3,035</b>	<b>3</b>	<b>£7,588</b>	<b>2</b>

### Annex 4 – Business case for reducing DMR contamination

Container option	Area	Capital cost to JWS	SWP match funding	Annual JWS benefit	JWS capital payback (years)	Annual taxpayer benefit	Taxpayer capital payback (years)
Option 1 – New metal bins with restricted aperture lids (new lids only for Mole Valley)	Elmbridge	£161,988	£160,668	£13,641	12	£34,102	10
	Mole Valley	£16,381	£15,853	£7,564	2	£18,909	2
	Surrey Heath	£101,235	£58,658	£6,301	16	£15,753	10
	Woking	£71,581	£70,987	£4,743	16	£11,859	13
	<b>Total</b>	<b>£351,184</b>	<b>£306,166</b>	<b>£32,249</b>	<b>11</b>	<b>£80,623</b>	<b>8</b>
Option 2 – Modify / replace existing bin lids	Elmbridge	£33,518	£33,518	£13,641	2	£34,102	2
	Mole Valley	£16,381	£15,853	£7,564	2	£18,909	2
	Surrey Heath	£16,041	£16,041	£6,301	3	£15,753	2
	Woking	£13,770	£13,770	£4,743	3	£11,859	2
	<b>Total</b>	<b>£79,709</b>	<b>£79,181</b>	<b>£32,249</b>	<b>3</b>	<b>£80,623</b>	<b>2</b>

**Annex 5 – Modified plastic bin lids to add a restricted aperture**



### Annex 6 – Business case to expand textiles and small electricals to all flats

Container option	Area	Capital cost to JWS	SWP match funding	Annual additional collection costs	Annual JWS benefit	JWS capital payback (years)	Annual taxpayer benefit	Taxpayer capital payback (years)
Option 1 – Metal sackholders	Elmbridge	£33,437	£32,621	£5,777	£16,707	2	£17,037	4
	Mole Valley	£18,945	£18,492	£3,212	£2,979	6	£3,221	12
	Surrey Heath	£13,903	£13,570	£2,357	£15,568	1	£16,022	2
	Woking	£17,228	£16,816	£2,921	£10,270	2	£10,727	3
	<b>Total</b>	<b>£83,513</b>	<b>£81,500</b>	<b>£14,266</b>	<b>£45,524</b>	<b>2</b>	<b>£47,007</b>	<b>4</b>
Option 2 – modified 140 litre bins	Elmbridge	£13,403	£12,588	£5,777	£16,707	1	£17,037	2
	Mole Valley	£7,808	£7,355	£3,212	£2,979	3	£3,221	5
	Surrey Heath	£3,297	£2,964	£2,357	£15,568	0	£16,022	0
	Woking	£7,100	£6,688	£2,921	£10,270	1	£10,727	1
	<b>Total</b>	<b>£31,608</b>	<b>£29,595</b>	<b>£14,266</b>	<b>£45,524</b>	<b>1</b>	<b>£47,007</b>	<b>1</b>

## Annex 7 – Textiles and small electrical container examples

Metal sackholders



Modified 140 litre bin

