

# Waste Management

## **Position Statement**

Financial Year 2019/20

## 1.0 Introduction

The following document has been produced to clarify Oldham Council's Waste Management Service (WMS) current position within its existing internal and external waste management environment.

The report builds upon the content of the Waste Management Strategy 2013/14 and explains the importance of balancing performance (recycling rates) and cost avoidance (revenue and disposal budgets) moving forward. In the absence of a clear national strategy on the future of waste management this note has been produced to explain the current positioning of the service

## 2.0 WMS Performance Indicators

There are three basic indicators that can be used to judge WMS performance:

- 1) **Operational performance** – how well it manages the actual operation (i.e. staff, H&S, vehicles, depot etc) through its revenue budget.
- 2) **Disposal performance** – how well it manages the waste tonnages generated and amount we pay for disposing of those tonnages through its disposal budget.
- 3) **Environmental performance** – how environmentally friendly its waste collection activities and waste disposal responsibilities are compared with other viable options.

Please note that the three indicators are intimately linked. A good example of this would be when we consider collecting more recycling material. An additional vehicle out collecting recycling would operationally cost £125K a year. We would therefore have to ensure that there was at least this amount of disposal savings for the activity to be financially viable. There would also then need to be consideration (non-financial) about the environmental impacts of that vehicle on the road including air quality.

### 2.1 Operational Performance

In recent years WMS have made significant operational efficiency savings by changing the structure of its collection systems (i.e. moving to a 2-weekly and then a 3-weekly collection system).

In October 2016 the WMS implemented a 3-weekly collection system (with a weekly collection of food and garden waste) across Oldham. This system has provided the Council with the optimal way (in terms of recycling performance and operational efficiency) to collect waste.

### 2.2 Disposal Performance

Changes to our collection systems have also produced significant cost avoidance within our disposal budget. This is because residents must manage their waste more efficiently and make better use of their recycling services.

Year	Refuse	Comingled	Paper	Organic	Total	Domestic Recycling Rate	Household Recycling Rate
2015/16	41,075	8652	7677	12,506	69,909	41.25%	38.88%
2018/19	33,863	9,515	7030	14,684	65,092	48.36%	44.65%

Points from the table:

- 2015/16 was the financial year before 3-weekly being introduced when the Council had a 2-weekly collection system
- As well as a significant reduction in refuse tonnages there has also been a reduction in the total waste produced which points to residents changing their behaviour and reducing the amounts of waste, produced.
- Domestic recycling rate is a more accurate barometer of recycling performance as household recycling rate (HRR) includes tonnages from fly tipping, street cleaning and street sweeping activities.
- The figures support the national trend in reduced paper tonnages

The introduction of the 3-weekly system in 2015/16 has improved the household recycling rate (HRR) by 5.77%.

Year	Household Recycling Rate %
2015/2016	38.88
2016/2017	42.53
2017/2018	44.69
2018/2019	44.65

### 2.2.1 Household Recycling Rate

Oldham's HRR has remained around the 44.65% mark for the past two financial years. This demonstrates that whilst the introduction of three weekly collections has been successful in increasing domestic recycling and reducing total waste arisings, the HRR has now plateaued.

The most pertinent point here being that significant service change (2-weekly to 3-weekly collections) and all the work/resources/finances required to support this change, produced a 5% shift in HRR. Without a significant strategic driver it is unrealistic to expect that the HRR will improve significantly in future.

Whilst HRR provides a general indication of how an authority is performing against others it is by no means a quality indicator of actual performance (i.e. prudent financial and operational management). Oldham's 44.65% should be viewed with a source of pride as the resources and financial investment in achieving this figure have been as significant as it has been successful. Important factors to consider when looking at future improvements in HRR include:

- **GM performance** – Oldham has several socio-economic factors which limit its recycling performance. Homing some of the countries most deprived residential wards impacts on the priority/importance of recycling within many Oldham homes. Achieving a comparable HRR with the more affluent boroughs within the GM conurbation (i.e. Stockport and Trafford) is therefore an unrealistic target.
- **Terrace property** – Oldham behind Liverpool, has the second largest number of terrace property in the country making up over 44% (approx.: 45,000 props) of its housing stock. This significantly limits the amount of garden recycling tonnage that can be collected. Should Oldham have a similar breakdown of housing to other GM authorities (Stockport and Trafford) we would enjoy a HRR well above 50%.

- **Financial viability** - Oldham now has settled 3-weekly collection service. Projects, innovations and ideas to improve HRR rates at this point would require business casing to prove whether that they would financially viable to undertake.
- **National trends** – We are now starting to see significant shifts in recycling materials and behaviour. A good example of this is the national trend being seen in the use of paper/card products. There are fewer newspapers, magazines, yellow pages being used as these products move online (see table below). Supermarkets and product manufacturers are now looking to reducing packaging wherever possible, moving where possible to lighter products.
- **National environmental initiatives** - There are now several major environmental promotional campaigns aimed at waste reduction i.e. reducing food waste etc, single use plastics, heavy packaging, home composting. These will impact on and potentially recycling tonnages/figures in future (like paper tonnages above).

A table to show how paper and card tonnages have followed a declining trend since 2010/11:

Year	Total Tonnage
2010/11	9460
2011/12	9003
2012/13	8271
2013/14	8006
2014/15	7715
2015/16	7601
2016/17	7681
2017/18	7583
2018/19	7030

## 2.2.2 Levy Allocation Methodology Agreement (LAMA)

The Greater Manchester Waste Disposal Authority (sat within the GMCA) is the body responsible for managing waste disposal on behalf of all 9 GM local authorities. They are also responsible for managing the following GM owned assets and facilities:

- 20 Household Waste and Recycling Centres
- 7 Transfer Loading Stations
- 5 Mechanical Biological Treatment Facilities
- 3 In Vessel Composting Facilities
- A Materials Recovery Facility

The operational day-to-day running of these facilities is contracted out to waste industry experts. On the 1<sup>st</sup> June 2019 the waste disposal authority awarded a new seven-year waste disposal contract to SUEZ.

The LAMA is the method in which the total annual cost of the contract is split between the 9 local authorities. Most of the LAMA is based on a model using the total amount of tonnages produced by each local authority. To form the basis of the new SUEZ contract Oldham's 2017/18 actual tonnages were used within the procurement process.

<b>General Rubbish</b>	40,581
<b>Paper &amp; Card</b>	7,629
<b>Commingled</b>	9,456
<b>Organic</b>	15,134

<b>Trade Waste</b>	8,829
	81,629

These figures are the basis of Oldham's contribution to LAMA costs for the next 5 financial years. Against these figures a fixed and variable costs are then apportioned as follows:

		<b>Fixed</b>	<b>Variable</b>	<b>Total</b>	<b>Total Disposal Costs</b>
<b>General Rubbish</b>	40,581	£276.88	£38.27	£315.15	£12,789,102
<b>Pulpable</b>	7,629	£13.31	-£13.29	£0.02	£153
<b>Commingled</b>	9,456	£13.31	-£13.29	£0.02	£189
<b>Organic</b>	15,134	£42.53	£53.81	£96.34	£1,458,010
<b>Trade Waste</b>	8,829		£96.00	£96.00	£847,584
	81,629				<b>£15,095,037</b>

The important point to realise with Oldham's position within the LAMA, when looking at performance is that when should we improve/reduce any part of our disposal figures we would only receive the variable element of any tonnage costs back. For example, reducing general rubbish by 1,000 tonnes would save the Council 1,000 tonnes x £38.27 = £38,270.

This factor becomes very important when evaluating the viability of projects to improve recycling figures. An example of this would be removing food waste out of the general rubbish bin and into an organic stream. Basic calculations to understand the the viability of this project can be presented as follows:

#### **Project Savings:**

- We currently collect 15,134 tonnes using 7 vehicles = 2,162 tonnes per annum per vehicle
- 2,162 tonnes x variable cost rebate of £38.27 = £82,739 cost saving

#### **Project Costs:**

- Cost of a new vehicle and crew per annum = £125,000
- 2,162 tonnes x organic tonnage £53.81 = £116,337
- Total costs as above = £241,337
- *Not costed – new caddies, bins, communications, additional resources for delivery, call handling, project officers, management time, service pressure.*

## **2.3 Environmental performance**

There are two main ways in which the WMS can manage its environmental impact, operationally in terms on waste collection activity and then how the waste we collect is processed and disposed of.

### **2.3.1 Operational – Waste Collection Activity**

The WMS has endeavoured wherever possible to make efficiency savings within its collection round systems. Collection rounds are now fully capacitated meaning that we would require additional vehicle to undertake any new work. The service will also receive a fleet of new vehicles (from 1<sup>st</sup> Aug 2019/20) which are on 'Economy 6' diesel engines. These are the cleanest and most fuel-efficient vehicles available to us currently.

### 2.3.2 Disposal Arrangements

The new SUEZ contract will manage approximately 1.1 million tonnes of municipal waste from over 1 million households with a combined contract value of over £1billion. GMCA together with SUEZ will focus on diverting over 96% of Greater Manchester's municipal waste from landfill. Householders will inevitably play their part in supporting reuse and recycling by waste separation at home. However, the contract offers wider potential to increase overall recycling and landfill diversion through material recycling facilities, improvements to household waste recycling sites and the use of waste to energy plants.

As well as the facilities listed above the contract for waste disposal also includes access to the energy recovery incinerator facility at Runcorn. The facility there is one of the largest energy recovery facilities currently operating in Europe and converts pre-treated refuse-derived fuel produced from non-recyclable waste into heat and energy. The facility is a Combined Heat and Power plant. It treats approximately 850,000 tonnes of refuse-derived fuel each year. This waste would have otherwise been sent to landfill. The fuel is produced from household and commercial waste after recyclable materials have been removed. The facility generates enough electricity to power the site itself and the equivalent to around 150,000+ homes. It also generates heat which is used by a nearby chemical manufacturing site.

In terms of environmental impacts, the disposal route detailed above provides a modern and diverse solution to the significant tonnages being produced across GM.

### 3.0 WMS strengths

Key WMS strengths can be identified as follows:

- **Operationally** – the service is well structured and operationally efficient. When we compare our service provision with other authorities locally there is a comfort that we demonstrate real quality, prudent management and operate on stable financial platform. The management team within the service is also longstanding which offers good levels of experience and understanding of the internal and external waste environment.
- **New vehicle fleet** – the new vehicle fleet (2019) and vehicle technology on them ensure that the WMS can operate efficiently with modern systems (i.e. 360-degree cameras)
- **3-weekly collections** – this collection system is the optimal system for collecting waste currently. The system is well embedded within the borough which has allowed us to build the quality and consistency of the waste collection services we provide.
- **Performance** – Oldham's 44.65% HRR is a significant achievement.
- **Disposal arrangements** – Oldham has a fit for purpose, modern disposal solution for all of its waste material streams.

### 4.0 WMS weaknesses

Key WMS weaknesses can be identified as follows:

- **Settled operational and disposal systems** – although we derive many strengths from the working systems, we have place (3-weekly and the disposal contract) they can also count as a weakness in terms of flexibility. An example of this would be Oldham's ability to recycle other types plastics. Low grade plastics such as margarine tubs and fruit packaging are placed in the grey bin along with residual household waste. A common request we get is for these to be recycled within the brown bin. This is not possible currently due to market conditions which

have informed the contract and the processing equipment we currently operate at the disposal facilities.

- **Waste composition** – A recent compositional analysis of Oldham’s waste suggests that there is potentially more material that can be diverted out of general rubbish and into a recycling stream. 43.4% of waste in general rubbish bin could be recycled with paper 2.8%, Card 2.8% and food 30.2% being the most found waste stream.

## 5.0 WMS Opportunities

Key WMS opportunities can be identified as follows:

- **Trade Waste** – The WMS trade waste service has an ever-expanding presence within the borough with significant increases seen in the number of business serviced and income created. This service now contributes over £1.5 million back into operational budgets and the intention at this point is to continue to improve income generation.
- **Compostable liners** - A successful initiative which Waste Management was instrumental in developing and launching was the introduction of compostable carrier bags in partnership with the Co-op. This initiative adopted by all Co-op stores in Greater Manchester saw the Co-op replace single use plastic bags with compostable carrier bags which can be used to line food waste caddies in the home. There now exists a compostable bag which all businesses in GM can purchase and supply to residents.
- **GMCA environmental communications** – The communications team at the GMCA has a launched several initiatives and promotional campaigns aimed at tackling waste issues. These are free for local authorities to use and are supported by a modern website with good social media links.
- **Technology** – There are several tech opportunities available within the working environment that have the potential to improve the service. Examples include in-cab technology, improved back office systems and internal projects aimed at digital channel shift.
- **Optimising waste hierarchy messaging** - The waste hierarchy is well recognised and fully embedded within The Resources and Waste Strategy. Nationally there are several popular campaigns and well promoted social waste issues based on reducing waste before the need to dispose of it. Examples include Love Food Hate Waste, single use plastic (David Attenborough), supermarket and product packaging.



## 6.0 WMS threats

Key WMS threats can be identified as follows:

- **Continuing austerity** - As austerity continues and council budgets continue to shrink there are constant financial pressures which the service must meet. These pressure means that it is not always possible to carry the tasks and activities which Waste Management would like to do. For example, additional project work to gain more insight and educate residents on how to

recycle more or to continue previous project work to further enhance the knowledge sharing and education on how to optimally dispose of waste.

- **Performance improvement (viability)** - The Waste Management Levy Allocation Method (LAMA) is reviewed every year so maintaining current figures and performance is imperative otherwise we could face increasing disposal costs.
- **Performance improvement (Trade waste)** – All local authorities across GM are charged a reduced cost for trade waste general rubbish tonnages. Increased disposal costs could have a significant financial implication for the service (viability).
- **External Policy (National)** – The government is currently consulting on several waste industry issues which may have impact on the way that we collect waste in future.
- **External Policy (Air Quality)** – The new fleet vehicles are Euro 6 compliant. However, there is the threat that future air quality policy could lead to changes in vehicle emission standards and/or local congestion charging, which could impact on the service.
- **Contamination** – Under the new contract there may be a tightening of the regime to control contamination within each or all the current recycling streams. As we have experienced in the past this activity can start becoming very costly very quickly with each vehicle load rejected potentially costing us over £2,500.
- **Maintaining performance** – It is important to understand that without continual work and communications with residents on domestic waste issues that the current performance enjoyed by the service will start to naturally drop. Any drop in current performance will lead to increased costs for the service. There has to be recognition that there is important everyday work being undertaken by staff within the WMS to maintain our current performance levels.

## 7.0 Conclusion

The WMS has successfully implemented a number of major service changes which have achieved a HRR of 44.65%. Looking to improve performance moving forward there are several financial, operational and environmental considerations which must be carefully assessed for their actual benefits to the service and the Council as a whole. The service without an obvious future driver for improvement within its domestic tonnage figures (moving to 3-weekly collections) must maintain its current waste performance level through officer work and effective communications. The continued improvement (number of contracts and increased income) in the trade waste service is vital for the service as budgets remain under continued pressure. There should also be a concerted effort into maximising waste reduction techniques wherever possible.

## 8.0 WMS priorities for 2019/2020

Priorities for Waste Management service are as follows:

- 1) Trade Waste** - Increasing the number of contracts and income generated by trade waste service.
- 2) Waste Reduction** – Focus on any/all activities and communications aimed at removing waste from the waste stream before it is required to be disposed of. Especially food which forms 30% of waste within general rubbish bin.
- 3) Contamination** – Ensuring that contamination levels within our recycling waste streams do not exceed maximum limits for load rejection.