

Delegated Decisions report



21 December 2021

RECYCLING SERVICES

Name of Cabinet Member	<p>Councillor Lauren Townsend (Cabinet member for Public Realm)</p> <p>Councillor Rob Middleton (Cabinet member for Resources)</p>
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Exempt / confidential / not for publication	Yes
Council Plan reference	Council Plan Commitment 30 Deliver better waste and landscaping services
Wards affected	All wards

Executive Summary

The Environmental Services Programme has been reviewing its future service provision for recycling treatment and processing.

The current service contract with Biffa for the operation and management of the Materials Recycling Facility (“MRF”) is due to expire at the end of March 2023. There is a requirement to develop new recycling services to commence from 1 April 2023 to support the Environmental Services Programme. This report explores the options commissioned for recycling services and provides a recommendation that a new facility is developed at the existing recycling site in Old Wolverton.

1. Decisions to be Made

- 1.1 That the public and press be excluded from the meeting by virtue of Paragraph 3 (Information likely to Reveal the Financial or Business Affairs of the Authority) of Part I of Schedule 12A of the Local Government Act 1972, in order that the meeting consider the **confidential Annexes** to the report.
- 1.2 That the transformation of the current Materials Recovery Facility (MRF) site to a Waste Transfer Station (“WTS”) to handle recyclable material collected from households and other relevant properties in the borough, be approved.
- 1.3 That the connection of the WTS to a private wire which will include the provision of the electric vehicle charging infrastructure at the WTS, be approved.
- 1.4 That the WTS’s ability and capacity to potentially handle other household waste streams (which will provide a contingency delivery point in the event that other recycling delivery points are temporarily unavailable), be noted.
- 1.5 That the Director - Environment and Property, in consultation with the Director - Finance and Resources, be delegated authority to enter into commercial discussions to pursue the preferred option 1A, as detailed in the **confidential Annex A**, and to reach an agreed position on this option.
- 1.6 That the Director - Environment and Property, in consultation with the Director - Finance and Resources, be delegated authority to enter into commercial discussions to pursue either or both of options 1B and 2, as detailed in the **confidential Annex A**, should an agreement not be reached with regard to option 1A.

2. Why is the Decision Needed?

- 2.1 The Material Recycling Facility site is one of three Milton Keynes Council (“MKC”) owned waste assets in Old Wolverton area along with the Milton Keynes Waste Recovery Park (“MKWRP”) operated by Amey and the environmental services depot currently occupied under the environmental services contract by Serco.
- 2.2 MKC commissioned the current MRF in 1993 and it was the first purpose built MRF of its type in the UK. A contract for the Operation and Management of the Materials Recycling Facility was awarded to Community Waste Limited in 2009. Viridor acquired Community Waste Limited in 2011 and operated the MRF until 31 August 2021.
- 2.3 The Viridor contract was purchased by Biffa and transferred to Biffa on 1 September 2021. The MRF has a design capacity / licence to treat 150,000 tonnes per annum (tpa) based on 3 shifts (24h) operations but is currently handling MKC waste only (approx. 15,000 tpa).

- 2.4 There has been a reduction in volume processed as the tonnage from Central Bedfordshire and Bedford Borough Councils is now being processed through an alternative provider. Therefore, as there is insufficient tonnage to justify operating as a processing facility, the site is currently operating in the interim as a WTS with recyclables being bulk hauled and treated in alternative facilities.
- 2.5 There is a payment from the Council of circa £900k per year linked to contamination.
- 2.6 Despite the contamination cost and the reduction in value of recycled materials and disruptions to supply chain caused by international market forces, MKC has had benefit from being shielded from these factors providing an economically favourable recycling service.
- 2.7 Surveys of the civil infrastructure and processing equipment have been undertaken. The facility is considered to be in a “fair” structural condition but would require additional maintenance beyond 2023. This includes including roof replacement, new floor slab, drainage and surfacing and fire protection systems Several items of operational equipment are in a poor condition, namely the roller doors, balers, bale breaker, air separation unit and bag splitters. In addition the MRF has an outdated SCADA (operating) system all of which would require major investment.
- 2.8 The MRF is configured to accept bagged mixed dry recyclables excluding glass. There is limited scope to increase the number of materials accepted due to the outdated configuration and technology.
- 2.9 From 2023, the Council intends to roll out a new collection scheme comprising in the main:
- 180 litre wheeled bin residual collected weekly.
 - 180 litre wheeled bin for paper and card collected fortnightly.
 - 180 litre wheeled bin for metal, glass and plastic containers collected fortnightly.
 - 140 litre wheeled bin for food and garden collected weekly.
- 2.10 MKC commissioned several reports into future options for recycling. The report “**MRF Cost basis for a Milton Keynes Zero £ Gate Fee**” states the break-even point where all the MRF costs are met through gate fee and recycle income (with MKC paying zero-pound gate fee for the MKC MRF input material and the capital costs only) is around 65-75 Ktpa (thousand tonnes per annum).
- 2.11 The “**Milton Keynes MRF Options Appraisal**” considered five options appraisals of which are considered further under section 4 of the report:

- (a) develop a waste transfer station at the MRF site and procure recycling contracts at existing facilities;
 - (b) refurbish the existing MRF building with new processing equipment;
 - (c) rebuild the MRF with new processing equipment;
 - (d) develop a new MRF on a new site in MK; or
 - (e) develop a smaller MRF to handle MKC waste only.
- 2.12 To support the options analysis a report was commissioned into the “**MRF options around Milton Keynes**” to assess whether there would be suitable facilities to place MKC recyclables and capacity should it not progress with rebuilding or refurbishing the existing MRF (i.e. transfer to a WTS). The review of dry mixed recyclable MRF facilities within approximately 100 miles of Milton Keynes identified 3M tonnes per year of headline capacity.
- 2.13 MKC commissioned a separate report into potential options to demonstrate the benefits of integration and interoperability between the MRF site and other waste services. It identified that the redevelopment of the site into a WTS could have the following additional benefits:
- Contingency - Site for MKWRP for additional tonnage or in case of fire.
 - Flexibility - Ability to handle current feedstock and 2023 commodities.
 - Synergies - Bulking and shredding of “difficult waste” from MKWRP.
 - Resilience - Ability to handle and bulk food and garden waste.
 - Interoperability - Shared operations, Safety Health Environment and Quality, management, security and maintenance (see **confidential Annex B** - Benefits of WTS Integration)
 - Efficiency - Colocation of spares and consumables.
 - Sustainability - Private wire from MKWRP for electrical vehicle charging.
 - Quality Control - Ability to pre-sort material without having to manage demand risk of filling a MK funded MRF.
- 2.14 The Council intends to connect the MKWRP site via private wire (“PW”) to the proposed WTS site. The planned works to convert the MRF to a WTS will also include the provision of the electric vehicle charging infrastructure at the WTS (former MRF) site.

- 2.15 The PW will enable the equipment at the WTS and the landscape, street cleaning and play areas fleet to move to zero emissions vehicles powered by renewable energy generated from waste collected from the borough.
- 2.16 Phase 1 of the PW was approved in the capital programme by Cabinet in September 2021. The business case for this investment is on the basis of a scenario that assumes that the MRF may be converted to a WTS, phased electric waste collection fleet and no income from the bus depot.
- 2.17 In due course it is proposed to connect the adjacent environmental services depot to the PW, enabling electrification of the waste collection fleet in the future.
- 2.18 There is scope to extend the PW during phase 2 to deliver renewable electricity to the bus depot. This could support the recent Zero Emission Bus Regional Areas (“ZERBA”) grant awarded to MKC. Any recommendation to proceed with Phase 2 of the PW will be subject to a separate commercial negotiation, due diligence, agreement on terms and a future Council decision in 2022.
- 2.19 The Council is exploring options regarding future land requirements for Environment and Waste, including recycling, services which may include compulsory purchase. Any recommendation to formally start land acquisition, and the process by which land may be acquired, will be subject to a future Council decision in 2022.
- 2.20 In summary:
- The current recycling contract expires at the end of March 2023.
 - The costs of processing recycling have increased significantly over the past 10 years and markets have become increasingly volatile.
 - The structural condition of the MRF and the processing equipment is such that significant investment is required at the MRF site.
 - Interoperability of the WTS and MKWRP provides future contingency and deliver on the greenest city agenda with a private wire and decarbonisation of future fleet.

3. Implications of the Decision

Financial	Y	Human rights, equalities, diversity	N
Legal	Y	Policies or Council Plan	Y
Communication	Y	Procurement	Y
Energy Efficiency	Y	Workforce	Y

(a) Financial Implications

It has been increasingly challenging and expensive for local authorities to secure recycling contracts and even more challenging to secure those at cost within affordability. The median gate fee in 2012 for MRF contracts was £9 per tonne according to the WRAP annual gate fees report. The current (2020) reported median gate fee is £43 per tonne with a high point of £113 per tonne. The high point gate fee reflects a low-quality input similar to the quality of recycling in MK. These costs are for material delivered only with waste handling and haulage costs excluded.

We do not pay a “gate fee” for the treatment of recyclables at the MRF. There is an annual contamination charge of £900k per year assuming a contamination rate of c25%. MKC also pays for the disposal of rejected materials and process residues above the 10% contamination threshold which are transferred to MKWRP. MKC receives a fixed income of £700k under the current contract which would not be offered by a new MRF provider in the current climate. The net annual revenue spend for recycling services is therefore £390k per year which is equivalent to £26 per tonne based on 13-15Ktpa of bagged recyclables and 3-4Ktpa of glass.

Our financial advisors, Grant Thornton have prepared a summary cash flow model built on capital and operational cost assumptions provided by technical advisors Woods. Grant Thornton undertook modelling on the 3 shortlisted options (1-3 at paragraph 2.11 above) for comparison over a 16-year period (assumes 1-year construction phase and 15 year operational phase). Reflecting the state of the current recycling market, all modelled options result in a higher cost to MKC.

The modelled total cost of the refurb and rebuild MRF options is £38M (noting that the rebuild options include a considerable residual life assumption of £17M). The calculated NPV of the MRF options is £25.7M – £29.5M. The budget deficit for the MRF options is c.£21M.

The waste transfer station option has a total modelled cost and calculated NPV of £18.9M and £12.2M respectively. With an assumed annual recycling budget of £892K the budget gap over the modelled period of 15 a year operational life is £1.6M (average annual cost of £1.18M).

Option	Capital Cost of Option	Total Cost of Option (16 years)	NPV (16 years)	Annual Average Cost	Equivalent Cost per Tonne (yr1)
Develop a waste transfer station at the MRF site and procure recycling contracts	£4M - £6.6M* (low – high scenario renders)	£18.9M	£12.2M	£1.2M	£51
		£23.8M	£15.5M	£1.5M	£67
Refurbish the existing MRF building with new processing equipment	£20M	£38.6M	£25.7M	£2.4M	£134
Rebuild the MRF with new processing equipment**	£31M	£37.9M	£29.5M	£3.4M***	£188

* Higher banding cost equates to additional work not included in lower banding civils investigation (i.e. replacement roof)

** Given the significant additional investment the new build options includes a significant residual value amount.

*** Excluding assumed residual value.

(b) Legal Implications

The Council has a duty, under section 45(1)(a) of the Environmental Protection Act 1990, to arrange for collection of household waste from premises (waste collection authority function). In accordance with section 51 of the Environmental Protection Act 1990, it is the duty of each waste disposal authority such as MKC to arrange for the disposal of the controlled waste collected in its area by the waste collection authority. Under section 55 of the Environmental Protection Act 1990 a waste disposal authority may make arrangements to recycle waste or agree with another person for its disposal or treatment.

The Environment Act 2021 has received royal assent with further guidance expected on recyclable materials which must be collected by local authorities. Further guidance is also expected on deposit return schemes. Such schemes will have the effect of removing high value recyclables such as aluminium cans, ferrous cans and clear dense plastic packaging from the input streams into a new MRF and leave a higher proportion of lower value items such as plastic films and paper packaging. Therefore, significant investment in a new MRF has greater legal exposure due to uncertainty around future policy. A WTS has lower legal risk as there is greater certainty in the short and medium term.

Legal assessment has been conducted of option 1A which is the preferred option recommended within the report. The advice is included as **confidential Annex C**.

Should agreement not be reached with regard to option 1A, a fuller legal assessment will be conducted on options 1B and 2 and this will be

taken into consideration in determining whether to proceed with either options.

(c) Communication Implications

A successfully education and engagement programme has been operating out of the MRF site with a primary function of teaching children in MK the benefit of reducing, reusing, and recycling waste. An educational facility is available at MKWRP which will now be used as the primary site for recycling and education programmes.

(d) Energy Efficiency Implications

The private wire proposals would allow the future environmental services fleet to be powered by renewable electricity from MKWRP. The proposed refurbishment of the MRF site will take into account latest construction methods to ensure the building meets current energy efficiency regulations.

(e) Policies or Council Plan Implications

The decision supports the *“Commitment to doing the essentials well – deliver high quality essential services for all residents that keep our city running well”* and in particular Commitment 15 to *“Bring forward the future operational models for waste and landscaping services beyond the end of the current contracts in 2023”*.

(f) Procurement Implications

The procurement implications are predicated on the final delivery mechanism taken forward and will be fully explored in any future decision to proceed. The key procurement implications are included in **confidential Annex A**.

(g) Workforce Implications

There are no implications of Milton Keynes Council staff. The incumbent provider has commenced consultation with its staff in anticipation that the site will operate as a WTS in the interim period. To mitigate against any job losses, there will be a programme to potentially redeploy staff into vacancies across MKC environmental services contractors.

4. Alternatives

4.1 Option 1 - Do Nothing / Do Minimum

- The change in feedstock to the MRF due to the proposed collection changes, together with the infrastructure requirement, result in the “Do Nothing” option at the MRF not being an option.

- The do minimum option involves mothballing the processing equipment and investing in the reception and outside areas to provide a fit for purpose, covered waste transfer facility. Extensive upgrades to the building, drainage and surfacing would still be required along with an overhaul of the fire detection and protection systems.

4.2 Option 2 - Refurbish the Existing MRF Building with New Processing Equipment

- This is a high capital and overall cost option.
- There is moderate risk associated with the final position of the Environment Act 2021 expected by 2023.
- Option 2 and Option 3 have the most scope for realising future economic benefits albeit with uncertain market and demand risks associated with it.
- Option 2 and Option 3 have the greatest opportunity afforded by the use of renewable electricity from MKWRP and ensure waste is treated as close to source as possible.

4.3 Option 3 - Rebuild the MRF with New Processing Equipment

- This is the highest capital and total cost option.
- There is moderate risk associated with the final position of the Environment Act 2021 expected by 2023.
- Option 2 and Option 3 have the most scope for realising future economic benefits albeit with uncertain market and demand risks associated with it.
- Option 2 and Option 3 have the greatest opportunity afforded by the use of renewable electricity from MKWRP and ensure waste is treated as close to source as possible.

4.4 Option 4 - Develop a Waste Transfer Station at the MRF Site and Procure Recycling Contracts (**this is the recommended option**)

- This is the lowest capital and total cost option.
- Subject to commercial terms and the overall appetite for market risk, this option has the lowest scope for future economic benefits linked to material sales and third-party waste gate fees.
- This is the most flexible option and provides contingency delivery capacity for other waste e.g. food and garden waste.
- Although this option reduces the electricity demand via the private wire, the business case can be realised by connecting the environmental

services depot for future electrification of the fleet in addition to the bus depot.

- Other waste tonnages (such as Food and Garden Waste) are likely to be moved there finessing the operations on site in advance of capital investment.

4.5 The scope of the WTS transformation would include:

- development, including costs, of detailed design;
- works to transform MRF to WTS (including decommissioning and reuse, where applicable, of the existing MRF equipment);
- refurbishment of the accommodation block;
- Phase 1 of the PW including any back-up supply;
- electric vehicle charging infrastructure (WTS and depot);
- operation and maintaining of WTS;
- handling and haulage of recyclables; and
- offtake arrangements for recyclables (subject to business case review).

5. Timetable for Implementation

2022-2023	Support the transition undertaken by incumbent provider
Spring 2023	New recycling services start
Summer/Autumn 2023	Completion of WTS transformation
2028	Review recycling services in line with the initial term of the Environmental Services Contract. Review of position on MRF / WTS.
2033	Review recycling services in line with the recommissioning of new MKWRP contract.

List of Annexes (exempt)

Annex A	Recycling Services Delivery Strategy
Annex B	Benefits of WTS Integration
Annex C	Legal Advice in Relation to Regulation 72 of PCR2015

List of Background Papers

MRF Cost basis for a Milton Keynes Zero £ Gate Fee Report
Milton Keynes MRF Options Appraisal Report
Grant Thornton Summary Cash Flow Model Report
Private Wire Business Case