



MILTON KEYNES COUNCIL

TECHNICAL WASTE MANAGEMENT

OPTIONS APPRAISAL

**ASSESSMENT OF MBT WITH A STABILISED
OUTPUT (LATS COMPLIANT).**

DRAFT V0.1

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1 Introduction

This report forms the part of the Technical Options Appraisal¹ intended to enable the authorities Milton Keynes Council (MKC) to make informed decisions upon the best technical approach for the long term treatment / management of municipal solid waste (MSW).

Utilising the previous options appraisal study the performance of an MBT technology (assume one as researched in the recent Juniper report) with a residual output that can be effectively landfilled will be modelled in the same format as the previous 12 technologies. The performance of this technology will be gauged utilising the same front end recycling as previously used in the options appraisal study.

2 Modelling

2.1 Plant

The MBT process modelled was the VKW MBT process set out in the Juniper report. Table 1 below shows the assumed flow output modelled and Table 2 shows the assumed BMW of each of the output streams.

Table 1: VKW MBT Output as shown in the Juniper report

Material	% of stream
Fe metals	1.8%
Rejects	26.0%
Biostabilised output	35.8%
Waste gases	36.4%

Table 2: VKW MBT Output BMW

Material	BMW of stream	BMW % Source
Fe metals	0%	Jacobs Babbie
Rejects	52%	High CV RDF value - Fitchner (2004) RDF Opportunities: Coal and Cement Industries, Resource Recovery Forum, Skipton.
Biostabilised output	0%	Jacobs Babbie
Waste gases	100%	Jacobs Babbie

2.2 Biostabilised output

There is no data available on the composition of this output therefore the BMW has been assumed to be 0%² due to the reference to “stabilised output”.

¹ Buckinghamshire County Council & Milton Keynes Council Waste Management Technical Options Appraisal, Formal Issue, Version 2, 8th February 2005

² This is an assumed value for modelling is yet to be seen whether this process is able to process will be able to do this in the UK and whether DEFRA/Environment Agency will accept this.

3 Important Note

At the time of writing this report, the Environment Agency (EA)/Department for Environment, Food and Rural Affairs (DEFRA) have not yet agreed that a stabilized output will be considered as LATS acceptable.

4 Results

The following tables show the MBT output in both the Meet and Exceed scenarios.

Table 3: Table 15 as in options appraisal (meet) showing year 2020/21

Options	Waste throughput	Front End recycling/ Composting	Recycling gained by Technology	Overall recycling/ composting	LATS (Shortfall) Excess	Tonnage landfilled
1e	98,795	45.7%	1.1%	46.8%	834	67,618

Table 4 Table 16 as in options appraisal (exceed) showing year 2020/21

Options	Waste throughput	Front End recycling/ Composting	Recycling gained by Technology	Overall recycling/ composting	LATS (Shortfall) Excess	Tonnage landfilled
1e	98,795	45.7%	1.1%	46.8%	834	67,618

They are both the same in this year

5 Conclusion

Should the EA/DEFRA consider a stabilized output as LATS compliant then this type of plant would be preferable to one that's output does not confirm. However confirmed costs were available for this plant but were not made available to the researchers of the Juniper report. Clear detail to the overall costings would need to be considered before final decisions could be made.