DEVELOPMENT OF JOINT MUNICIPAL WASTE MANAGEMENT STRATEGY – PROPOSED RESPONSE

1 SUMMARY

1.1 The purpose of this report is to seek Members' views with regard to the most appropriate method of disposing of waste in the future.

2 BACKGROUND

2.1 The Waste Management Advisory Board (WMAB), of which Rochford is a member, commissioned Environmental Resources Management (ERM) to produce a Waste Management Strategy for Essex.

2.2 The firm of Weber Shandwick has been engaged to carry out a public consultation exercise in respect of the proposals set out in the proposed strategy.

2.3 Copies of the draft strategy and consultation document have been sent to all Members of the Council.

2.4 The consultation was launched on 1 October 2002. Councillors Capon, Cutmore, Mrs Glynn, Mockford, Oatham, Mrs Vince and Mrs Weir attended a presentation on the issue on the 18 October 2002.

2.5 The consultation closes on the 30 November 2002.

3 OPTIONS

3.1 In essence the consultation exercise is seeking views as to the most favoured method of waste disposal for the future. The proposed strategy gives six options for discussion. Other options may be put forward. The option finally selected could be one of the six proposed, an amalgam of more than one option, or an entirely new option.

3.2 Outline information regarding the six options has been extracted from the consultation document and is attached as Appendix 1 to this report.

3.3 Four of the six options contain an element of incineration. The two non-incineration options require countywide composting rates of 60% or 45%. The non-composting option with recycling of 45% is the dearest. The cheapest option would require only 33% recycling, but

significant incineration, which would require the provision of 2 – 3 incinerators within the County.

3.4 In the view of the consultants who have devised the strategy, the options which include significant incineration are regarded as being less harmful to the environment, except in the area of resource depletion.

3.5 Other waste management professionals would argue differently in respect of the assertions made in support of incinerations. Rochford, in partnership with other Essex Districts, has campaigned against incineration, utilising research and evaluation carried out by Ecologica. As such, the Waste Management Plan issued by Essex County Council, is based on the premise that incineration would only be used as a last resort.

3.6 Chelmsford Borough Council has already responded to the consultation. They have requested that their views be presented to Members in order that they may be taken into account in formulating our own response. The views of Chelmsford Borough Council are attached as Appendix 2.

4 QUESTIONS REQUIRING RESPONSE

4.1 The questionnaire contained in the consultation document asks six very simple questions, from what is a very complex subject. A copy of the questionnaire is attached as Appendix 3.

5 COMMENTS

5.1 The current policy of Rochford is one of non-incineration. In continuing to support this type of option, it will be necessary, along with other Essex Authorities, to achieve the 60% recycling required in respect of option 1 or 45% for option 4. Option 4 is slightly more expensive than option 1 and is argued to have a greater environmental impact.

5.2 The current Rochford kerbside recycling scheme is achieving 58% recycling rate. This would indicate that 60% recycling is achievable. There would be, of course, a significant cost to the Council of placing the whole of the District onto the kerbside recycling scheme. The full scheme needs to be achieved by 2010.

5.3 Option 5, which has the high incineration content of 44%, still requires a countywide level of recycling of 33%. The Council will still be required to meet the Government statutory recycling targets, which will require further expansion of the kerbside recycling scheme.

5.4 As mentioned previously in this report, Council's existing strategy is strongly in favour of recycling as opposed to incineration. The option most closely associated with this policy is option 1. Option 1 also has the advantage of using established technology in the medium term. The Mechanical Biological Treatment (MBT) element is not required until the period 2020 – 2026.

6 ENVIRONMENTAL IMPLICATIONS

6.1 The full environmental implications are set out in the proposed strategy.

7 PARISH IMPLICATIONS

7.1 The recycling initiatives will over time affect all parishes.

8. RESOURCE IMPLICATIONS

8.1 No matter which option is chosen, there will be significant resource implications for both County and Districts. Unless additional funding is received from Central Government, the costs will eventually fall on local taxation.

9 RECOMMENDATION

It is proposed that the Committee **RESOLVES**

(1) To support option 1.

(2) To determine any comments or views in support of the chosen option.

Roger Crofts

Corporate Director (Finance & External Services)

Background Papers: Draft Strategy and Consultation Document.

For further information please contact Jeremy Bourne on:-

Tel:- 01702 318163
E-Mail:- jeremy.bourne@rochford.gov

APPENDIX 1

Option 1

This option aims to achieve the 60% target for recycling and composting household waste by 2010. In order to meet Landfill Directive targets, a low level of waste would have to be dealt with using mechanical biological treatment (MBT) from 2020.

High recycling and composting rates currently being achieved in small trials in Essex would have to be improved further, and repeated across the county, with a very high degree of public involvement needed. At the moment, there are no councils achieving this level of recycling and composting in the UK.

This option fares well in some environmental areas, but poorly in others because of the energy required to collect and process recyclables separately. About 80% of the small proportion of waste treated by MBT would be landfilled, although this material could be dealt with by thermal treatment or a proportion separated for recycling.

Overall, this option is the third most expensive, costing a total of £3,029 million for the period ending 2025/26, an annual cost per household of £165.14.

New infrastructure required

Time period	Existing infrastructure plus:
2002-6	recycling/composting facilities and collection infrastructure to handle 495,000 tonnes
2006-12	in addition recycling/composting facilities and collection infrastructure to handle 265,000 tonnes
2012-20	in addition recycling facilities and collection infrastructure to handle 46,000 tonnes
2020-26	mechanical biological treatment to deal with 57,000 tonnes

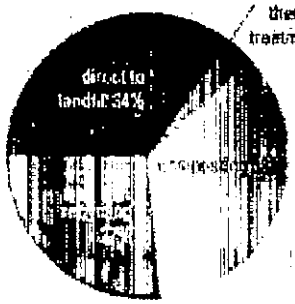
Option 2

This option is also based on achieving the 60% target level of recycling and composting by 2010. A low level of advanced thermal treatment capacity would be required from 2013.

High recycling and composting rates currently being achieved in small trials in Essex would have to be improved further, and repeated across the county, with a very high degree of public involvement needed. At the moment, there are no councils achieving this level of recycling and composting in the UK.

There are currently no advanced thermal treatment facilities operating in the UK. This option generally has a high impact on the environment.

Overall, this option is the second most expensive, costing a total of £3,037 million for the period ending 2025/26, an annual cost per household of £165.56.



New infrastructure required

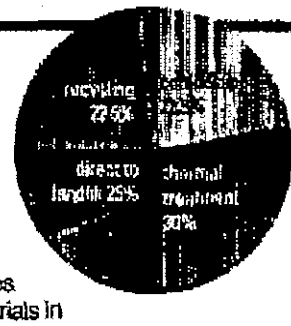
Time period	Existing infrastructure plus:
2002-6	recycling/composting facilities and collection infrastructure to handle 495,000 tonnes
2006-12	in addition recycling/composting facilities and collection infrastructure to handle 265,000 tonnes
2012-26	in addition recycling facilities and collection infrastructure handle 46,000 tonnes thermal treatment to deal with 95,000 tonnes

8

New infrastructure required

Time period	Existing infrastructure plus:
2002-6	recycling/composting facilities and collection infrastructure to handle 495,000 tonnes
2006-11	in addition recycling/ composting facilities and collection infrastructure to handle 81,606 tonnes
2011-13	thermal treatment to deal with 200,000 tonnes
2013-26	in addition composting facilities and collection infrastructure to deal with 20,600 tonnes In addition thermal treatment to deal with 208,000 tonnes

Option 3



This option would achieve a recycling and composting rate of 45% by 2010. A moderate level of advanced thermal treatment capacity would be required from 2010.

The recycling and composting rates presently being achieved in small trials in Essex would need to be repeated across the county. A high degree of public participation would be needed with this option, but some councils are already reaching this level of recycling and composting in the UK.

There are currently no advanced thermal treatment facilities operating in the UK.

This option generally has a low impact on the environment.

Overall, this is the third cheapest option, with a total cost of £2,896 million for the period ending 2025/26, an annual cost per household of £157.92.

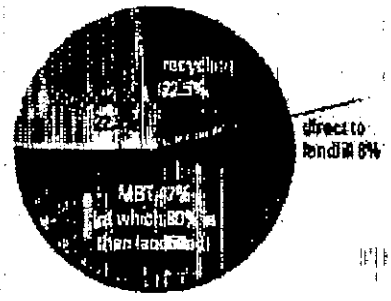
Option 4

This option is based on achieving a recycling and composting rate of 45% by 2010. A significant amount of mechanical biological treatment (MBT) capacity would be needed from 2010.

The recycling and composting rates presently being achieved in small trials in Essex would need to be repeated across the county. A high degree of public participation would be needed with this option, but some councils are already reaching this level of recycling and composting in the UK.

This option has the highest impact on the environment. There are currently no MBT facilities operating on this scale in the UK. Approximately 80 per cent of the material treated by MBT would be landfilled, although this material could be dealt with by thermal treatment or a proportion separated for recycling.

Overall, this is the most expensive option, costing a total of £3,064 million for the period ending 2025/26, an annual cost per household of £167.08.



New infrastructure required

Time period	Existing infrastructure plus:
2002-6	recycling/composting facilities and collection infrastructure to handle 495,000 tonnes
2006-13	in addition recycling/composting facilities and collection infrastructure to handle 81,000 tonnes
2013-16	mechanical biological treatment to deal with 630,000 tonnes in addition composting facilities & collection infrastructure to handle 30,000 tonnes
2016-26	in addition mechanical biological treatment to deal with 670,000 tonnes

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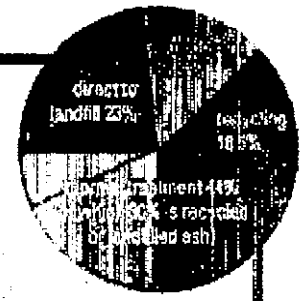


Option 5

This option is based on achieving a recycling and composting rate of 33% by 2010. A significant amount of conventional thermal treatment capacity would be needed from 2007.

It requires levels of recycling and composting that are well below those achieved in small trials in Essex, but significantly higher than the current rate across the county. Several councils in the UK are currently reaching the level of public participation that is required.

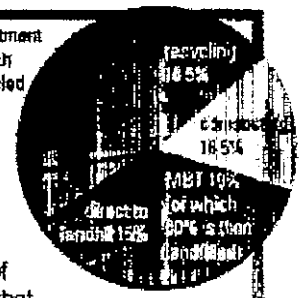
Incineration would play a significant role, although advanced thermal treatment could be introduced from 2010.

This option is generally one of the more environmentally friendly. About 30 per cent of waste incinerated would become bottom ash that might be recycled as an aggregate, or otherwise landfilled.

Overall, this is the cheapest option, costing a total of £2,815 million for the period ending 2025/26, an annual cost per household of £153.49.

New infrastructure required

Time period	Existing infrastructure plus
2002-6	recycling/composting facilities and collection infrastructure to handle 330,000 tonnes
2006-12	in addition recycling/composting facilities and collection infrastructure to handle 50,000 tonnes thermal treatment to deal with 300,000 tonnes
2012-26	in addition thermal treatment to deal with 200,000 tonnes



Option 6

This option is based on achieving a recycling and composting rate of 33% by 2010. A moderate amount of conventional thermal treatment capacity would be needed from 2007, and a smaller amount of mechanical biological treatment (MBT) capacity after 2010.

It requires levels of recycling and composting that are well below those achieved in small trials in Essex, but significantly higher than the current rate across the county. Several councils in the UK are currently achieving the level of public participation that would be required. However, this option generally has a low impact on the environment.

New infrastructure required

Time period	Existing infrastructure plus
2002-6	recycling/composting facilities and collection infrastructure to handle 330,000 tonnes
2006-12	in addition recycling/composting facilities and collection infrastructure to handle 50,000 tonnes thermal treatment to deal with 175,000 tonnes
2012-18	mechanical biological treatment to deal with 105,000 tonnes - in addition thermal treatment to deal with 275,000 tonnes
2018-26	in addition mechanical biological treatment to deal with 135,000 tonnes

There are currently no MBT facilities operating on the required scale in the UK. Some 80 per cent of the waste treated by MBT would be landfilled, although material could go through the thermal treatment process or a proportion of it separated for recycling. About 30 per cent of the waste incinerated would become bottom ash that might be recycled, or otherwise landfilled.

Overall, this is the second cheapest option, costing a total of £2,876 million for the period ending 2025/26, an annual cost per household of £156.85.

WOW! WAR ON WASTE

How do the options compare?

		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Does it meet government targets?	Does it meet recycling and composting targets?	✓	✓	✓	✓	✓	✓
	Does it meet Waste Strategy 2000* recycling targets?	✓	✓	✓	✓	✓	✓
	Does it meet Waste Strategy 2000* recovery targets?	Up to 2015 target	✓	✓	Up to 2010 target	After 2010 target	After 2010 target
	Does it meet Landfill Directive targets?	✓	✓	✓	✓	✓	✓

*Waste Strategy 2000 is the national waste strategy for England and Wales, introduced in 2000.

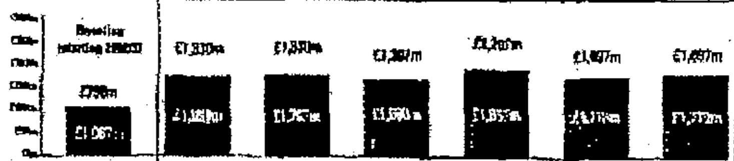
How good for the environment is it?

●●●●● Best for the environment
● Worst for the environment

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Pollution of surface and groundwater	●	●	●●●●	●●●	●●●●●	●●●●●
Contribution to acid rain	●●	●●	●●●●●	●	●●●●●	●●●●
Resource depletion	●●●●●	●	●●	●	●	●
Contribution to the greenhouse effect	●●	●	●●●●●	●	●●●●●	●●
Emissions harmful to human health	●●	●●	●●●●●	●	●●●●●	●●●●
Energy consumption	●●●●	●●●●	●●●●●	●	●●●●●	●●●

How much will it cost?

£m Collection cost / Disposal cost



	Baseline (existing 2002/3)	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Total cost	£1,803m	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total cost (NPV)*	£753m	£1,156m	£1,150m	£1,110m	£1,150m	£1,069m	£1,090m
Average annual cost per household for the period 2002/3 to 2025/6 (undiscounted)	£102.60	[illegible]	[illegible]	£157.02	[illegible]	[illegible]	[illegible]

*NPV – the Net Present Value – represents the total costs in today's monetary values for each option, which enables the options to be directly compared and ranked.

		Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
How feasible is it?	Has it been demonstrated elsewhere?	Not these levels of recycling	Not these levels of recycling. Not advanced thermal treatment	State-of-the-art recycling. Not advanced thermal treatment	State-of-the-art recycling. Not this scale of MBT	Yes	Yes
	Reliance on public participation	Very high	Very high	High	High	Medium	Medium

The size and location of facilities

The need for new facilities would vary over time, and choices over how large or small they should be will determine the number required and the parts of Essex they will serve.

A considerable amount of capacity would be required for recycling and composting, with each facility serving a particular group of Essex councils. In most cases, facilities could be grouped in two or three locations spread across the county, ensuring that environmental and economic costs of transport are kept to a minimum.

Number of facilities required

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
Number of recycling facilities	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Number of composting facilities	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Number of MBT facilities	1-3			3-5	[illegible]	[illegible]
Number of thermal treatment facilities	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

APPENDIX 2

Chelmsford Borough Council Waste Strategy Panel

Recommended Comments on the Consultation Document: A Municipal Waste Management Strategy for Essex, Southend and Thurrock

The Council considers that major advances in waste diversion have been achieved in the last three years and that a strategy based upon a 60% level of recycling/composting is practical and achievable. The Council considers that:

1. Only Option 1 within the consultation document should form the basis for further development work on a Countywide Strategy.

2. The Options 2-6 within the document would not form a basis for development of a strategy which would be likely to be acceptable to the Council.

3. The further development of Option 1 should be modular in nature to match the timetable for change imposed by the landfill directive targets. In particular, detailed consideration needs to be given to how the proposed increase in recycling/composting required to meet the 2010 and 2013 targets will be achieved, what actions would be required of each authority and how these might be implemented and funded.

   The actions in this respect should seek to implement, during the course of the first phase of the strategy, the Working Together Statement (which has already been agreed by the Councils). In particular, the aim should be that the achievement of the targets should remain on that original timetable, even though option 1 appears only to require around 40% recycling by 2007.

   The second phase of the developed strategy should have as a clear aim the achievement of a recycling/composting level which, as a minimum, would remove the need for mechanical biological treatment (MBT) in the period after 2020.

   The provision of recycling infrastructure (MRFs, bulking stations, composting facilities, etc) should be on the local scale. Much will change between now and 2010/13 and the aim should be to keep the strategy as flexible as possible during this period by reducing to a minimum the reliance on capital intensive solutions of all kinds, including those relating to recycling/composting.

   In addition to providing the necessary infrastructure at the kerbside during this early phase, it will also be necessary to support this with a hearts and minds publicity campaign at all levels, which should be included in all future estimates of cost.

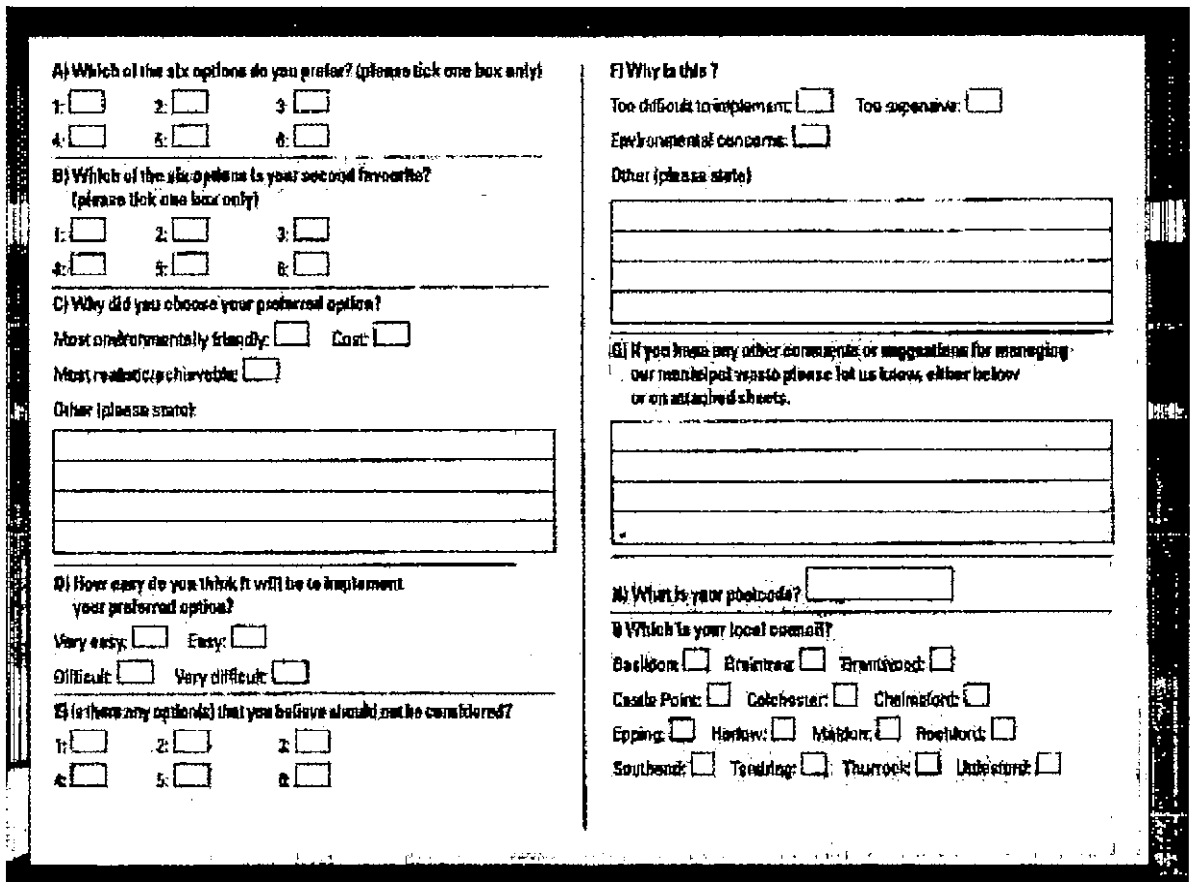
4. In addition to developing the necessary detail to understand the practical implications of the strategy in this initial period, a clear process for measuring progress against performance targets will need to be agreed, together with a timetable for detailed development of the strategy for the later parts of the strategy period. The Council would be pleased to participate actively in this.

   In developing the timetable for the later phases of the strategy, it should be a given that, in line with the Working Together Statement, the development of alternative processing methods will not be actioned until all practicable actions to increase recycling/composting to the highest achievable levels have been exhausted.

5. The Council would wish to consider the draft strategy again when this work is completed, along with all other stakeholders.

6. This Council will continue to work towards the principles of the Zero Waste Charter and encourages others to do the same and, in particular, to lobby Government to pursue vigorous and effective policies and actions to reduce waste at source.

APPENDIX 3



A) Which of the six options do you prefer? (please tick one box only)

1: ☐ 2: ☐ 3: ☐

4: ☐ 5: ☐ 6: ☐

B) Which of the six options is your second favourite? (please tick one box only)

1: ☐ 2: ☐ 3: ☐

4: ☐ 5: ☐ 6: ☐

C) Why did you choose your preferred option?

Most environmentally friendly: ☐ Cost: ☐

Most realistic/achievable: ☐

Other (please state):

D) How easy do you think it will be to implement your preferred option?

Very easy: ☐ Easy: ☐

Difficult: ☐ Very difficult: ☐

E) Is there any option(s) that you believe should not be considered?

1: ☐ 2: ☐ 3: ☐

4: ☐ 5: ☐ 6: ☐

F) Why is this?

Too difficult to implement: ☐ Too expensive: ☐

Environmental concerns: ☐

Other (please state)

G) If you have any other comments or suggestions for managing our municipal waste please let us know, either below or on attached sheets.

H) What is your postcode? ☐

I) Which is your local council?

Basildon: ☐ Braintree: ☐ Brentwood: ☐

Castle Point: ☐ Colchester: ☐ Chelmsford: ☐

Epping: ☐ Harlow: ☐ Maldon: ☐ Rochford: ☐

Southend: ☐ Tendring: ☐ Thurrock: ☐ Uttlesford: ☐