

Report to Environmental & Planning Services Standing Panel

Date of meeting: 23 April 2008

Subject: "The Future of Waste in Essex"

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Committee Secretary: Adrian Hendry



Recommendation:

To consider the Council's response to "The future of Waste in Essex" consultation and associated Strategic Environmental Assessment

Report:

Background

1. Essex County Council, with its District and Borough partners, is consulting the people of Essex on the revised draft Essex Joint Municipal Waste Management Strategy (JMWMS). The revised draft strategy reflects the changing circumstances over the last 5 years or so and also reflects the availability of new / revised technology and changes in national and European legislation.

2. In 2002 the County Council and Districts and Boroughs, with Southend-on-Sea, established the Waste Management Advisory Board (WMAB) which has examined many aspects of waste management within the County. The WMAB has always seen public and stakeholder involvement as key in developing a strategy, and all previous public consultation exercises, such as "War on Waste" have been considered in putting together the revised draft JMWMS.

3. This proposed strategy is crucial to the future management of waste within the County. It will determine the way forward in terms of procuring the infrastructure for waste collection and disposal for the next 25 years as well as meeting the statutory requirement for the County and Districts & Boroughs to adopt an agreed JMWMS to take forward the management of all the component elements of the waste stream.

Some key statistics

4. It is important to put the revised draft strategy into some context, so that the scale of the problem that has to be managed is clearly understood:

- in 2006/07 around 740,000 tonnes of municipal solid waste was produced in Essex
- on average each Essex resident produces around half a ton of waste per annum (500 kilos)
- in 2006/07 36% of this waste was recycled (via collection and/or at the Recycling Centres for Household Waste)
- around 68% of all waste produced is biodegradable i.e. can break down to produce greenhouse gases and leachate
- the EU landfill directive requires significant reductions in biodegradable waste going to landfill with a penalty (at present) of £150 per tonne where allowances are exceeded
- if the allowances for 2009/10 are exceeded Essex taxpayers could face a penalty of £9 million and if no change was to be made this would reach £24 million per annum by 2013
- each tonne of waste going to landfill currently costs £24 in landfill tax, increasing by £8

per tonne per annum. This could result in a total tax bill of £22 million by 2010/11 on top of the EU penalties

- the Waste Strategy for England 2007 has set challenging targets for the diversion of waste from landfill with new national targets for recycling and composting of 40% by 2010, 45% by 2015 and 50% by 2020
- the Waste Strategy for England has also set challenging targets for residual waste per person (i.e. that not reused, recycled or composted) of 225kg by 2020 this being a reduction of 50% from 2000 levels
- the County Council's waste disposal costs have increased from £36 per tonne in 2001/02 to £61 per tonne in 2006/07, reflecting the increased costs of landfill. The districts' and boroughs' costs range from £35 to £78 per household per annum depending upon performance and other local issues (2006/07 data).

Where are we now?

5. The responsibility for waste management lies jointly with the County Council as a waste disposal authority and the districts and boroughs as waste collection authorities. Southend-on-Sea as a unitary authority carries both responsibilities. Over the past 5 years or so diversion performance has steadily increased from 17% in 1999/2000 to 36% in 2006/07.

6. It is clear from previous consultations that Essex residents want to see a strategy that diverts as much waste as possible from landfill, but by the provision of high levels of recycling and composting and not through mass burn incineration (i.e. the burning of all waste). The increases in performance across the County demonstrates the wish of the County and the Districts & Boroughs to achieve that, and a considerable investment has been entered into by many districts, including Epping Forest DC, into new collection and recycling arrangements. In this District this has seen recycling increase from 22% in 2003/04 to around 42% now.

The current consultation

7. What are the key messages within the consultation?:

- (1) reduce the overall waste stream and re-use more of it;
- (2) to achieve 60% recycling by 2020;
- (3) favouring composting technologies such as anaerobic digestion (AD) for source segregated organic wastes;
- (4) using mechanical biological treatment (MBT) for waste which cannot be recycled; and
- (5) the potential to use solid recovered fuel (SRF) to provide energy and heat

8. A key issue in this proposed strategy is that relating to the outputs from the MBT plant. There are two clear options available:

- (i) send to landfill; or
- (ii) produce SRF and use to create renewable energy source

The strategy suggests that the use of SRF should be explored since it provides energy which can be supplied back into the national grid and heat which could be used for other commercial purposes. This would have financial and climate change benefits, when compared to landfilling, and reduces even further reliance upon landfill.

9. For the strategy to be effective new waste management facilities will be required, such as MBT, AD, energy plants (for SRF) and materials handling. The numbers will vary dependant upon type, and details of this are set out in the County Council's "Reference Project" which forms part of its application to Government for PFI funding for the provision of the necessary waste management infrastructure. Final details of the reference case will come forward to the Council for consideration later this year.

10. As set out in the earlier part of the report, the costs of waste management are increasing significantly. This will happen no matter what action is taken, but it is clear that

doing nothing will cost more than implementing a revised strategy and will not deal with the environmental consequences of not diverting waste away from landfill. It is estimated that implementing the proposed new strategy will save Essex taxpayers some £750 million over the next 25 years compared with carrying on as we are.

11. The Panel's views are sought on the following key questions:

- (1) does it agree with the basic underpinning policy of reuse, recycling and composting?;
- (2) does it agree that 60% is a realistic target for recycling by 2020?;
- (3) does it agree that AD and MBT are appropriate technologies for the handling of Essex waste?; and
- (4) does it agree that the outputs from the MBT plant should be used to produce a fuel for renewable energy (SRF) rather than being sent for landfill?

12. The full strategy document (and supporting documents) can be found on the County Council's website on www.essex.gov.uk/wasteconsultation

Strategic Environmental Assessment (SEA)

13. The County is required by law to commission an SEA as part of this process, and whilst not strictly part of the consultation process, the Panel's attention is drawn to the SEA Environmental Report and the County would welcome any comments. The SEA is also available on the County website at the same address as the draft JMWMS (see para. 12 above)

14. The consultants, 'Eunomia Research & Consulting' found the draft strategy to be generally positive in environmental terms, but it did comment upon some potentially negative impacts such as:

- the reliance upon road transport to transport waste to plants, although this was placed in context of the affects upon the climate being 50 times lower by virtue of the removal of waste from landfill compared to its transportation
- waste plants may cause some local air quality issues but these can be managed through the consents required
- the reliance upon new technology and a move away from landfill does reduce flexibility in the event of plant related difficulties

15. The SEA process requires that the environmental effects of the strategy should be monitored such that unforeseen effects can be identified at an early stage and appropriate remedial actions taken. The SEA puts forward a monitoring plan and in so doing recognises the burdens placed on councils in gathering the data required. The monitoring arrangements are attached for the Panel's information and comment as appropriate.

How should Epping Forest District Council respond to the consultation?

16. This Council has over recent years increased its recycling performance considerably. The new contract with Sita provides opportunities to continue this progress, although it does get more difficult and more expensive as the recycling rate moves towards 50%.

17. Key elements of the proposed strategy align with what we are presently doing and our future intentions, such as:

- continued high recycling levels
- the collection of food waste
- increasing public education & information
- providing more recycling facilities in flats and other communal buildings

18. The proposed strategy has also to be seen alongside the procurement strategy, which is presently being considered in detail by the Area Joint Waste Committees. The

procurement process will have to be capable of delivering on the ground the final JMWMS and this Council will be required to make decisions on use of the facilities to be provided by the County Council. These decisions will have an impact on what the Council does for many years to come.

19. There is only one potentially controversial issue in the proposed strategy, and that relates to the issue of SRF. SRF, or solid recovered fuel, is a source of fuel for energy generation, but this could require a plant to be constructed somewhere in Essex. There will be inevitable concerns that this is incineration by another name, but this is a different technology, specifically designed to burn this type of fuel effectively and efficiently. The electricity produced can be fed back into the national grid and it receives a higher payment due to the biomass component of SRF being considered as renewable energy. The biomass component of SRF is typically in excess of 50%.

20. SRF is generated from the MBT process, and MBT relies upon all of the potentially recyclable materials having been removed from the process before the main MBT process commences. The MBT process itself has a number of possible waste separation techniques to again ensure the removal of potentially recyclable or reusable materials before actual treatment commences. It is estimated that an MBT plant can contribute an additional 5% of recycling performance on top of other traditional means of recycling. The biological treatment component of the process then reduces the remainder of the waste through one or more of drying, composting or anaerobic digestion. The outputs vary dependant upon the technologies used and can include compost like outputs (CLOs) and SRF. CLO can be problematical in that it cannot be used on agricultural land and therefore is only really useful for land reclamation etc. This limits its long term use and leads towards the preference of SRF which can be used for a variety of purposes including fuelling existing plants (such as cement kilns) or for purpose designed energy plants.

21. A failure to provide a market for MBT outputs would require it to be landfilled. Whilst this is far preferable to landfilling unprocessed waste, it still uses up limited landfill capacity and has a cost associated with it, albeit reduced due to the MBT process reducing the overall biomass of the waste.

22. The questions as set out earlier in the report are reproduced here to assist in members' deliberations:

- (1) does it agree with the basic underpinning policy of reuse, recycling and composting?;
- (2) does it agree that 60% is a realistic target for recycling by 2020?;
- (3) does it agree that AD and MBT are appropriate technologies for the handling of Essex waste?; and
- (4) does it agree that the outputs from the MBT plant should be used to produce a fuel for renewable energy (SRF) rather than being sent for landfill?