The Core Strategy - Waste

Issues & Options

This document has been produced by the City Council as a part of the first stage in preparing Plymouth’s new Local Development Framework (LDF).

Plymouth is experiencing a period of significant change. There is a real expectation of improving the quality of people’s lives in a way that truly reflects the aspirations of local communities. Significant developments are already underway to deliver key elements of this vision. Further major opportunities are coming forward. We need your help to evolve a Development Framework to manage these changes effectively.

In order to shape the content of this new development framework, we would like to know:

- **What sort of Plymouth do you want to see in the future?**
  The answers to this question will shape the ‘Core Strategy’ document which outlines how the city will evolve over the next ten or more years.

- **What changes, if any, need to be made in your area to help improve it?**
  The answers to this question will shape the location and range of types of waste handling, treatment and disposal facilities that will be needed for the sustainable management of Plymouth’s waste arisings, which will be set out in the Waste Local Development Document.
This document is intended to generate discussion about the issues and opportunities for the location and type of facilities that are necessary to support the sustainable management of waste. Given the broader remit of the new 'spatial planning' system to go beyond the control and regulation of land use, there is now an opportunity to examine how the planning process can influence the reduction, reuse and recycling of waste, reflecting the principle that 'prevention is better than a cure'. It is not intended at this stage to be site specific, but rather to try and identify the more important strategic issues which will help to shape the way the area develops in the future.

This consultation on Waste Issues and Options will inform the preparation of more detailed guidance on this topic in both the Preferred Options Report for the Core Strategy and the Preferred Options Report for the Waste Local Development Document. In the case of waste development it is accepted that the guidance in the current Devon Structure Plan and First Deposit Local Plan should enable satisfactory progress in the interim.

The timetable for progressing the Waste Local Development Document is:-

• detailed policies and proposals for waste in the Core Strategy and Waste Development Document will be generated as a result of this consultation, which in turn will be consulted on in May/June 2005.

• This will lead to the submission of the Core Strategy to the Secretary of State late in 2005, and the submission of the Waste Local Development Document to the Secretary of State in the Autumn of 2006.

**We need your views to help us shape the waste policies and proposals for the Core Strategy and Waste Local development Document**
Waste in the 21st Century

As a society, we produce more waste than ever before and most of it is dumped into landfill sites, out of sight out of mind. So what’s the problem with that? The problem, put simply, is that waste starts out as a resource, often a naturally derived resource, which is unlikely to be a renewable one e.g. mineral, oil or metal. Economic growth and greater consumer consumption has lead to year on year growth in waste, which results in increasing levels of resource depletion. This ‘natural’ growth in waste has been exacerbated by unsustainable waste disposal practices. Waste which could have been re-used or recycled is dumped in landfills. This means that additional pressure is put on resources, which could otherwise be off-set by reuse or recycling of waste.

In response to the unsustainable growth, management and disposal of waste, the European Union and UK Government have set a framework and targets to limit waste production, minimise landfilling and to move waste management up the waste hierarchy by increasing recycling and recovery of waste.

The Waste Hierarchy

<table>
<thead>
<tr>
<th>Most preferred</th>
<th>Reduce</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reuse</td>
</tr>
<tr>
<td></td>
<td>Recovery</td>
</tr>
<tr>
<td></td>
<td>(recycling, composting, energy recovery)</td>
</tr>
<tr>
<td>Least Preferred</td>
<td>Disposal</td>
</tr>
</tbody>
</table>

Other important principles regarding the management of waste have also been established, which Plymouth must consider when preparing future waste management and planning options, these being ‘self sufficiency’ and the ‘proximity principle’. This means that an area must be prepared to deal with the waste it produces, and that it should be done as close to the source of waste production as possible.

All this means that Plymouth City Council and the community are expected to work together and put in place measures to reduce waste arisings, increase recycling and recovery, minimise the amount of waste sent to disposal at landfill and to do as much of this as is reasonably possible within Plymouth.
To paint a picture of what that currently means, the total amount of waste produced in Plymouth in 2002 was 620,900 tonnes.

This is broken down into:

<table>
<thead>
<tr>
<th>Waste Stream</th>
<th>Tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal Solid Waste (household +other collection)</td>
<td>172,000</td>
</tr>
<tr>
<td>Commercial &amp; Industrial Waste</td>
<td>84,500</td>
</tr>
<tr>
<td>Construction &amp; Demolition Waste</td>
<td>277,000</td>
</tr>
<tr>
<td>Sewage Waste/Waste Water</td>
<td>84,500</td>
</tr>
<tr>
<td>Hazardous/Special Waste</td>
<td>2,900</td>
</tr>
</tbody>
</table>

In 2002 this waste (excluding construction and demolition waste) was managed by the following methods:

<table>
<thead>
<tr>
<th>Method</th>
<th>Tonnes</th>
<th>As percentage of total waste. (excluding C&amp;D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landfill</td>
<td>222,000</td>
<td>64.6%</td>
</tr>
<tr>
<td>Recycled</td>
<td>21,500</td>
<td>6.3%</td>
</tr>
<tr>
<td>Composted</td>
<td>12,000</td>
<td>3.5%</td>
</tr>
<tr>
<td>Incinerated</td>
<td>3,700</td>
<td>1.0%</td>
</tr>
<tr>
<td>Treated (inc.resold)</td>
<td>84,500</td>
<td>24.6%</td>
</tr>
</tbody>
</table>

A significant challenge facing the City Council is that it does not control or manage all this waste. In fact it is only responsible for about a quarter of the total amount. The City Council is currently recycling 15% of household waste, which is 1% below target.

An additional problem is that the waste problem is getting worse. The average household in the city continues to increase the amount of waste it produces. In 2002 the people of Plymouth produced 172,000 tonnes of municipal solid waste. This is projected to grow to 225,000 tonnes by 2016, which represents an increase in this waste of approximately 30%, which far exceeds the predicted 4% increase in population by 2016.
To reduce the rate of waste generation and increase diversion from landfill, the City Council is in the process of reviewing its waste management strategy, as well as undertaking a wider review of its whole waste management and disposal functions. This will culminate in the production of a new Municipal Waste Management Strategy and the contracting out of the waste treatment and disposal service during 2005/6. The main link between the Municipal Waste Management Strategy and the Waste Local Development Document is that the Strategy sets out ‘how’ waste should be managed and disposed of, while the Waste Development Document sets out ‘where’ the waste should be managed and disposed of. However, the Waste Development Document needs to go further than dealing with municipal waste arisings. It needs to seek to influence the sustainable management of waste streams that the Waste Strategy cannot address, e.g. construction and demolition waste and commercial and industrial waste.

In reviewing the Waste Strategy the City Council will be seeking to establish a waste management system for municipal waste which meets various European, national, regional and local waste related targets.

In order to assist the City Council to prepare a Municipal Waste Management Strategy, independent advisors were commissioned to evaluate different waste management scenarios, based on different types of waste treatment technologies and facilities, to determine which, if any, would provide an effective waste management solution for the City’s municipal waste stream. The objective was to determine which scenario provided the most benefits or least damage to the environment as a whole, at acceptable cost in both the short and long term. This is a process known as Best Practicable Environmental Option (BPEO).

The City Council and other stakeholders need to carefully consider the options before the Council can put in place a well considered and risk assessed long term waste strategy which will result in affordable and sustainable waste management. It will also take several years before the many millions of pounds worth of new waste management facilities and associated systems, needed to deliver the Strategy, are up and running. Therefore, an interim proposal to manage and dispose of the City’s waste whilst the long term solutions are planned, built and commissioned will be necessary.
Waste is an issue we are all responsible for and everyone in the community can play a role in reducing the quantity of waste produced and moving towards more sustainable waste management practices. The issues which the City Council and community face as part of the preparation of a waste development document are:

- Closure of Chelson Meadow landfill waste disposal site in March 2007.
- Forthcoming review of the City’s Municipal Waste Management Strategy and development of a long term strategy for the sustainable management of waste in the city.
- The need to positively plan to create the conditions necessary for the implementation of the municipal waste management strategy.
- The need to make sufficient provision for facilities for the sustainable management of waste streams other than household and municipal.
- Contracting out of the City’s waste treatment and disposal functions.
- The need to meet national, regional and local waste related targets and legislative requirements.
- The need to implement the waste planning policy and provision framework established by the South West Regional Waste Strategy.
- The need to improve waste information and monitoring for certain waste streams.
- The need to consider ways to reduce the growth in municipal and household waste below the current average of 3% per year.
- The potential need for an interim solution to manage and dispose of waste during the establishment of the long term waste treatment and disposal system.
- The need to take positive action to minimise the amount of waste produced in the non-municipal sectors.
- The need to encourage movement up the waste hierarchy which seeks to re-use then recycle waste before recovering resources (including energy) from waste.
The need to secure a final waste disposal (landfill) option which does not conflict with sustainable waste management objectives.

The need to be as self sufficient as possible in terms of the management of the city’s waste and to provide waste management facilities in close proximity to the source of waste production.

The need to identify suitable sites for waste management and treatment facilities which will be needed to deliver the long term Municipal Waste Management Strategy and other waste arisings not addressed by the strategy.

The need to identify the issues raised by waste management development and to evolve a set of planning policies which provide a framework for the consideration and determination of waste related development proposals.

Vision

In 2016 Plymouth will be a city with a socially, environmentally and economically responsible approach to waste management, where everyone can play a role in delivering long term sustainable waste management, which will show a positive trend in waste minimisation, significant increases in recycling, composting, and energy recovery and a dramatic decrease in the amount of waste being sent for disposal to landfill.

Options to deliver this vision

Waste minimisation

Is it appropriate for a waste local development document to contribute towards a culture and practice of waste minimisation, if so how?

Options include:

− Requiring development proposals to demonstrate how waste production during construction will be minimised, reused on site, or recycled.
A planning policy of requiring new residential development to include relatively small bin storage facilities could be introduced, to force householders to make active choices about their generation of waste, (this would need to be backed up by a number of collection and policing measures).

Reusing Waste

Is it appropriate for the waste local development document to encourage the reuse of waste, if so how?

Options include:

- Encouraging new development proposals that produce reusable waste to view it as a resource and make it available for re-use.

Recovery of waste

Recovery of waste includes recycling, composting and energy recovery (thermal treatment or incineration). This is an area where the waste local development document can have a significant impact by encouraging the recovery of waste through increased recycling, composting and energy recovery.

Options include:

• A requirement that new residential development is appropriately designed to accommodate two waste bins, one being for recyclables.

• A requirement that residential development proposals provide or contribute, where appropriate, towards the provision of convenient, small scale recycling centres for material not collected on domestic rounds.

• To encourage new development proposals to make use of recycled material where appropriate.

• To encourage development involving demolition to make use of the recycled demolition waste in the development.
• To encourage development proposals, other than residential, that are likely to generate recyclable material, to separate their waste streams and provide space and facilities to store separated recyclable waste for collection and to take part in recyclable waste collection schemes.

• To encourage development proposals, other than residential, to market their recyclable waste or to contribute information regarding the type of waste to a central information exchange source on reusable waste products.

• To allocate sites in the Local Development Framework where a cluster of businesses based on recycling would be permitted.

• To allocate sites for two additional district scale Civic Amenity Sites, one in the north of the city and one in Plympton.

• To allocate sites in the waste local development document capable of accommodating a range of waste management facilities, which could include in-vessel composting, waste to energy plants (the waste development document cannot be technology specific but this could include gasification, pyrolysis, thermal treatment or incineration with energy recovery).

• To work with adjacent waste planning authorities and with the South West Regional Assembly to ensure that sites are allocated, capable of accommodating a range of waste management facilities, (including in vessel composting and/or waste to energy plants) that are within reasonable access to the Plymouth principal urban area.
Waste Disposal - Landfill

Although Chelson Meadow is closing, a final landfill disposal option for waste, which can not be reused, recycled or recovered, will be required during the plan period up to 2016. The City Council will be expected to examine the potential for additional landfill within its area before it can prove that landfill outside the city is absolutely necessary.

Options include:

• To explore the potential for new landfill/raise sites within the city.

• To work with adjacent waste planning authorities and with the South West Regional Assembly to ensure that sites are identified with adequate future landfill capacity, and within reasonable access to the Plymouth principal urban area.

Proximity and self sufficiency

The City Council is bound by established national and regional policy that waste should be managed as close as possible to its place of production. This starts with householders and businesses managing their waste sustainably through to the Waste Authority managing the various types of waste it is responsible for. Plymouth, as a whole, should also aim to establish a mix of waste facilities that have the capacity to deal with as much of the volume, and as many of the different types of waste as possible, all in reasonable proximity to the place of production.

Options Include:

• Seeking to establish as many waste management and treatment facilities as necessary within Plymouth, but this could be contentious and will require difficult decisions to be made.

• Working with adjacent waste planning authorities and District Councils to ensure a sufficient mix and capacity of waste management and disposal facilities, where these can not be sited in the city.

• Ensuring that city and sub-regional waste management and disposal facilities are of sufficient long term capacity to meet the waste management and disposal needs of the larger future population associated with growth in the sub-region.
Interim waste management provision

It is likely that an interim waste management solution will be required to cover the period between the closure of Chelson Meadow and the establishment of the full range of facilities that will be needed to deliver both the Municipal Waste Management Strategy and other waste streams.

Options include:

- Introducing short term measures and facilities to increase recycling, composting and recovery to minimise the amount of waste requiring disposal.

- Bulking waste up at a new waste transfer facility in the city and transporting it to a landfill at another existing landfill site.

- Establishing a waste transfer facility with good connections to the principal road network and/or with connections to rail.

Sites for waste management facilities

The single most important expectation of waste local development documents is that they should now allocate a sufficient range of sites for different waste management, treatment and final disposal facilities. Some of these facilities will, and should be, integrated into larger ‘core’ waste management sites, whilst others need to meet local needs.

Options include:

- Establishing the site selection criteria for different types of waste management site, e.g. proximity to houses, standard of road connection, surrounding uses.

- Defining the type of sites that are likely to be suitable for different types of waste management facility, e.g. existing waste management sites, industrial estates, previously developed land.

- Defining particular sites for different uses. Sites currently allocated in the First Deposit Local Plan, or which already have waste management facilities on them, are:
• Chelson Meadow – existing waste management operations and allocated in First Deposit Local Plan as a potential waste management site.

• Shale quarry, Plymstock - allocated in First Deposit Local Plan as a potential waste management site.

• Prince Rock Depot, Cattedown – existing waste management operations with potential for additional facilities.

• Moorcroft Quarry, Plymstock – existing waste management operations with potential for additional facilities.

• Weston Mill Civic Amenity site – existing waste management facility.

• Waste transfer site, Colebrook, Plympton – existing waste management facility with potential for additional facilities.

• Derriford Hospital incinerator – existing waste management facility.

Controlling waste management development

Applications for waste management development will raise a host of different planning issues depending on the location of the site and the type of waste management facility proposed. The waste local development document should include a range of policies against which applications for waste facilities can be considered.

Options for the control of waste development include:

• Control of environmental impact (visual, amenity, health, nature conservation, heritage, landscape, contamination, flooding, pollution, nuisance).

• Control of impact on existing adjacent land uses.

• Control of impact of potential replaced land use.

• Control of impact on implementation of national, regional and local waste management strategies.

• Control of impact on transport issues.

• Control of sustainability impact.
Key matters for consideration:

- Should as many as possible of the waste facilities that might be needed to manage the city’s waste be accommodated inside the city, even if it is contentious and means making difficult decisions?

- What additional waste management or treatment facilities, other than those to deal with municipal waste, might be needed?

- Should the waste development document encourage the co-ordinated development of a single integrated waste management and treatment centre that can deal with as much as possible of the waste generated in the city and sub-region?

- What approach could or should the waste development document take in providing a waste planning framework to cover the period of the preparation of the Municipal Waste Management Strategy and the contracting out of the waste management and disposal service?

- Is there anywhere in the city where a new landfill site could be located?

- Are any of the sites listed above (as shown on the map) suitable for new waste management development. If so, what type of waste facility could they accommodate?

- Are there any other sites that should be looked at to accommodate major new waste management facilities?

- Should new civic amenity sites (district recycling and waste disposal centres) be provided in northern Plymouth and at Plympton?

- How can the waste local development document (LDD) promote waste minimisation and reuse?
We would like your views on these matters:

1) Is this the right vision for waste?

2) What do you think are the priorities for developing a sustainable waste management strategy for the city?

3) Are there other options to address these issues?
We need to know what you think

The statutory consultation period to respond is 7th March - 18th April 2005.

All comments must be received within this period and can be sent to:

**Strategic Planning Manager**

Planning & Regeneration
Plymouth City Council
Civic Centre
Plymouth
PL1 2EW

or

by fax: 01752 304294
by email: ldf@plymouth.gov.uk

Further copies of the leaflet and response forms are available from:

  - [www.plymouth.gov.uk/ldf](http://www.plymouth.gov.uk/ldf)
  - The Civic Centre (Planning Section)
  - Local Libraries

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