Somerset County Council
Minerals and Waste Development Framework

Waste Planning: Issues and Options (II)

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Cover photographs sourced via digital image libraries depicting waste as a resource and waste handling.

Copies of this document are available from:

Somerset County Council
Environment Directorate
County Hall
Taunton
Somerset
TA1 4DY
Tel: 0845 345 9188
Email: mineralsandwaste@somerset.gov.uk

For further details of the Somerset Minerals and Waste Development Framework, and to view and download this and other documents, please visit our website.

www.somerset.gov.uk/mineralsandwaste

To respond to the waste consultation online please visit:
www.somersetconsults.org.uk

Document control record

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1. Introduction


The Waste Core Strategy will be followed by a Waste Site Allocations document. Both of these documents form part of the Minerals and Waste Local Development Framework, which is required by the Planning and Compulsory Act (2004).

Waste planning documents are needed to manage the provision of appropriate waste management facilities across the county according to agreed policies, taking into account the scale and type of waste management facilities needed and the location and environmental, social and economic impacts of such facilities.

The stages involved in preparing the Minerals and Waste Local Development Framework (minerals and waste LDF or MWDF for short) are summarised below.

**BASIC STEPS IN PREPARING THE WASTE CORE STRATEGY**

**Issues and options** – this consultation stage sets out the broad issues concerning waste management in Somerset and presents options to resolve these issues.

**Pre submission document** – comments received during issues and options consultation are reviewed and used to inform the preparation of a policy document. This document is then open for consultation to all interested parties.

**Submission document** – comments on the pre submission consultation are reviewed and appropriate changes made before the document is submitted to the Secretary of State.
In late 2007 Somerset County Council consulted public opinion on issues relevant to local waste planning. 146 respondents submitted written comments during the consultation, including over 2500 comments in total. A summary of the consultation responses can be accessed via the Somerset County Council website (www.somerset.gov.uk/mineralsandwaste).

Clearly a significant amount of time has passed since this first phase of consultation. Progress has been made in the interim but this has been limited by changes in staffing in the Council, coupled with changes at a national level.

This new issues and options document builds on the consultation work already undertaken, bringing together elements not included in the original consultation and reinforcing or checking some of the messages from 2007.

Please note this new Issues and Options document does not include a complete set of preferred waste policies. Nonetheless, it is able to build on the results from the 2007 consultation in certain key areas.

1.1. Sustainability Appraisal

This document contains several sections on ‘sustainability appraisal’. Sustainability appraisal considers the impacts of the proposed policy approaches in environmental, social and economic terms.

Sustainability appraisal (SA) is used to assess whether proposed plans meet sustainable development objectives. These broader objectives are included in a Scoping Report that is available for download from the County Council's website: www.somerset.gov.uk/mineralsandwaste

In short, SA is a tool that supports robust policy making by ensuring that decisions are clearly informed by a summary of their likely impacts.

1.2. How to get involved

Questions are included throughout this paper to help the County Council to gather information that will inform future decisions. The questions are for guidance only and if you wish to add other comments please do so (section 7 refers).

Do not feel you must respond to all the questions. If you wish to respond to a single question only, that response will be a valid and valuable part of the consultation.

If you would like an electronic or paper copy of these questions, please email mineralsandwaste@somerset.gov.uk or call on 0845 345 9188.

There are various ways you can respond to the consultation as outlined below.
Online
We encourage stakeholders to respond to the consultation online if possible. This helps to reduce printing and posting costs and can offer a simpler way for many stakeholders to respond. To access the online version of the consultation, please visit: http://www.somersetconsults.org.uk

Stakeholders may wish to access the online version of this document at Somerset's libraries, where hard copies of the document should also be accessible.

By email
Please contact: mineralsandwaste@somerset.gov.uk

By post
Please contact:

Minerals and Waste Policy Team
PP C402b, Environment Directorate
County Hall, Taunton
Somerset, TA1 4DY

It is important that all responses include the following information:

Your name
Organisation (if any)
Address (1st line and post code as a minimum)
Ideally please include an email address and phone number.
Are you replying personally or on behalf of your organisation?

Please note that responses will be treated as in the public domain. If there is a concern relating to confidential supporting information for example, please get in touch with the County Council's minerals and waste policy team, using the contact details listed above.

Deadline for responses
The consultation is open until 11 May 2011. Please contact the minerals and waste policy team if you need more time to review the document.
2. Planning for sustainable waste management in Somerset

2.1. Somerset basics

Somerset is a predominantly rural county with a dispersed settlement pattern. Somerset County Council is the waste planning authority for the whole of Somerset, excluding Exmoor National Park.

The county includes a wealth of features that need to be protected. For example, it includes 127 Sites of Special Scientific Interest; 7 Special Areas of Conservation; 2 Special Protection Areas and 5 Areas of Outstanding Natural Beauty (two of which are largely sited in neighbouring counties). Much of Somerset is low lying and therefore at risk from flooding.

Towns identified as centres for growth in adopted planning policy include Bridgwater, Burnham on Sea and Highbridge, Chard, Crewkerne, Frome, Glastonbury, Ilminster, Minehead, Shepton Mallet, Street, Taunton, Wellington, Wells, Wincanton and Yeovil. A significant proportion of the county's current planned development is linked with Bridgwater, Taunton and Yeovil.

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Bridgwater, Taunton and Yeovil are well connected by road and enjoy good external accessibility. Certain parts of Somerset are also well connected by rail and some areas by water. The dispersed geography of the county means that transport accessibility is a key issue in rural areas as there is a relatively limited local road network – Mendip, central and western Somerset are particularly constrained. A topic paper on waste transport, available via the County Council's website, provides further information on this issue.

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2.2. The different types of waste

There are various types of waste that Somerset County Council needs to consider in its work on waste planning policy. These include municipal solid waste, commercial and industrial waste, construction and demolition waste and other types such as radioactive waste, hazardous waste, waste water (sewage) and agricultural waste.

Municipal waste includes mainly household waste, which is comprised of garden waste, kitchen waste, ‘black bag’ mixed waste and a range of recyclables, from smaller items such as newspapers, glass bottles or aluminium cans to larger waste electrical and electronic equipment (otherwise known as WEEE). Business waste (in particular, commercial waste) includes many waste streams that are similar to household waste, such as paper, metals, food, glass and mixed waste.

There are different options for managing unavoidable waste. The main options are: recycling and reuse; recovering energy through residual waste treatment; and landfill. These can be presented in a hierarchy where landfill is the least favourable option at the base of the hierarchy and waste prevention at the top.

![Hierarchy of waste management options](image)

The level of treatment required depends on the type of waste treated (the inputs) and the type of outputs required (for example, energy or materials), both of which vary with local circumstances.

Due to the large variety of waste streams and the level of investment needed to build and operate one treatment facility, it is highly unlikely that every local area will contain all the facilities needed to process every waste type that it generates.
2.3. Waste service provision in Somerset

The Somerset Waste Partnership (SWP) manages municipal waste in Somerset on behalf of Mendip, South Somerset, Sedgemoor and West Somerset District Councils, Taunton Deane Borough Council and Somerset County Council. If you're interested to know what happens to the municipal waste generated in Somerset, refer to the ‘End Uses Register’ available on the SWP website. You can also read more about the SWP’s services on their website: http://www.somersetwaste.gov.uk or contact them by email: enquiries@somersetwaste.gov.uk

In April 2010, the SWP’s SORT IT PLUS programme added plastic bottle and cardboard collections to its SORT IT kerbside collection service operating in Taunton Deane, Mendip and South Somerset. The SORT IT PLUS programme is being rolled out across the whole of Somerset, beginning with Taunton Deane and Sedgemoor, then introduced in Mendip and South Somerset and going countywide next year. This has been made possible by a funding agreement between the partner authorities.

Businesses across Somerset are free to make whatever arrangements they choose for managing their waste, subject to compliance with their Duty of Care. In other words, the majority of waste generated lies outside local authority control. In Somerset a range of waste service providers are active in business waste collection, treatment and disposal. The amount of business waste diverted from landfill (up the waste hierarchy) is increasing, responding to regulatory drivers such as the EU Landfill Directive and financial drivers such as increasing cost of landfilling in the UK.

Wessex Water is the main operator for waste water (sewage) treatment in Somerset. More information on waste water is included toward the end of this document.

2.4. Waste planning policy in Somerset

Somerset County Council needs to consider where appropriate waste treatment facilities could be located in Somerset and make provision for managing all waste types (not just municipal waste). The County Council, as waste planning authority, does not specify the type of treatment such as composting or energy recovery; but it does provide policies that guide decisions as to whether or not to grant planning permission for new waste management facilities.

The Waste Local Plan for Somerset 2001 – 2011 was formally adopted by the County Council in February 2005. Since then, legislation has been introduced by the UK Government which means that the Local Plans on minerals and waste prepared by Local Planning Authorities will be replaced by the Minerals and Waste Local Development Framework. The Waste Core Strategy forms an important part of the Minerals and Waste Local Development Framework (otherwise known as the minerals and waste LDF or MWDF for short).
3. Vision and Objectives

3.1. A vision for sustainable waste management in Somerset

Sustainable waste management in Somerset can be delivered by strengthening the links between effective spatial planning and appropriate waste management service provision. Local communities play a central role in managing waste and the Waste Core Strategy and subsequent Site Allocations document will seek to maximise the local benefits from using this resource effectively.

Sustainable waste management in Somerset means...

A culture in which communities are participants in waste avoidance and in which unavoidable waste is managed as a valuable resource in innovative ways that strengthen the economic well-being of Somerset, protect the county's unique environment and human health, and help to mitigate climate change.

By 2016 the facilities should be in place for a major shift from landfilling to the treatment of residual waste after recycling and reuse.

By 2028 the facilities should be in place for Somerset to minimise the amount of waste sent for disposal to landfill to the small fraction of waste that remains after treatment, the materials used for landfill cover and certain hazardous wastes.

Question 1: Do you support the proposed vision for sustainable waste management in Somerset?

a) Yes, because...
b) No, I would like to see it changed to include...
3.2. Key objectives of the Waste Local Development Framework

The following objectives are designed to strengthen the link between spatial planning and service provision whilst protecting the unique environment of Somerset. The objectives are grouped under three headings as depicted in the diagram below:

Place

OBJECTIVE A
To encourage waste avoidance and reduction as a priority from the outset of new development (ensuring that the waste implications of development proposals are taken into account) and throughout the life of the development.

OBJECTIVE B
To support the delivery of an appropriate network of waste management facilities for the life of the plan period in appropriate locations to deliver the Vision and other objectives of the Core Strategy, ensuring that existing and new communities are well served by appropriate waste management infrastructure.

OBJECTIVE C
To reduce the need to transport waste significant distances by road, increase the efficiency of waste transport and support the use of more sustainable modes of transportation where practicable, recognising the importance of finding an optimum balance between costs in environmental and economic terms.
OBJECTIVE D
To identify appropriate locations in which waste management and energy recovery facilities can be incorporated with other forms of development. Opportunities should be taken, in particular, to enable local use to be made of any power and/or heat generated from energy recovery processes.

Question 2: do you support the proposed objectives on place?

a) Yes, because...
b) No, I would like to see them changed to include...

Managing our waste as a resource

OBJECTIVE E
To empower local communities to become more involved in the management of waste as a resource.

OBJECTIVE F
To encourage the development and innovation of waste management technologies that encourage more waste to be diverted away from landfill and driven up the waste hierarchy, noting that economic viability and value for money will be important factors in the delivery of appropriate solutions.

OBJECTIVE G
To safeguard and expand existing waste management facilities, where appropriate, provided that they support the delivery of the objectives of the waste core strategy and the waste to resources agenda.

Question 3: do you support the proposed objectives on managing our waste as a resource?

a) Yes, because...
b) No, I would like to see them changed to include...
Community, Health and Environmental Impacts

OBJECTIVE H
To protect and enhance Somerset's unique natural and historic environment when considering the planning for and development of waste management facilities, the decommissioning of facilities when their operational life ends and the subsequent restoration of land.

OBJECTIVE I
To ensure that the quality of life and health and safety of communities are taken into account when considering the planning and development of waste management facilities, the decommissioning of facilities when their operational life ends and the subsequent restoration of land.

OBJECTIVE J
To reduce carbon emissions from waste management, informed by a broad view of the impacts of different treatment options, and encourage development that helps to mitigate the causes of climate change and adapt to its effects.

Question 4: do you support the proposed objectives on community, health and environmental impacts?

a) Yes, because...
b) No, I would like to see them changed to include...

Sustainability Appraisal comments
The proposed objectives have been found to be compatible with the objectives for Sustainable Appraisal listed in the County Council's Scoping Report (which can be found on the County Council website: www.somerset.gov.uk/mineralsandwaste). No incompatibility was found between the objectives of Sustainability Appraisal (SA) and the Waste Local Development Framework (LDF) objectives.

The Waste LDF objectives seek to manage Somerset’s waste needs in a way that protects the environment (objectives H and I), contributes to economic growth (objectives A, F and G) as well as ensuring communities are provided with adequate facilities to meet anticipated needs in a manner that protects their health and safety (objectives B, E and I). Objective C supports reducing the need to transport waste significant distances by road. This has the potential to reduce the negative impacts associated with HGV movements including greenhouse gas emissions, air pollution, noise pollution etc. Objective J is in line with the County Council’s climate change strategy to reduce greenhouse gas emissions emissions and adapt to climate change and is also compatible with Sustainability Appraisal objectives.
4. Planning for waste treatment

4.1. What do we need?

The vision of the Waste Core Strategy seeks to create a culture in which communities recognise the importance of waste avoidance and in which unavoidable waste is managed as a valuable resource. Different treatment technologies can be used to help recover materials or energy from waste and prepare the waste for further processing or disposal.

Research undertaken by Somerset County Council – and available for download from its website (www.somerset.gov.uk/mineralsandwaste) – has estimated the need for increased recycling and residual waste treatment capacity for municipal and commercial and industrial waste. The following key points are noted.

- Broadly speaking, up to approximately 100,000 tonnes of additional recycling capacity may be needed by the end of plan period. The need for such capacity may become pressing from 2020 onwards depending on the level of waste growth between now and then.

- To achieve the maximum amount of landfill diversion by the end of the plan period, as stated in the proposed vision, up to approximately 110,000 tonnes of additional residual treatment capacity for municipal waste may be needed, plus up to 280,000 tonnes of additional residual waste treatment capacity for commercial and industrial waste. When combining these waste streams together, the County Council forecasts a "need" for additional residual waste treatment capacity that could reach almost 390,000 tonnes. The County Council aims for a significant shift from landfill to residual waste treatment (after recycling and reuse) by 2016.

This treatment capacity, as summarised above, can be delivered in a number of different ways depending on the scale and type of technology applied. There are a number of planning applications (both determined and yet to be determined) that may help to deliver on the current requirements.

At the time of writing this issues and options paper, the Somerset Waste Partnership has yet to decide on its preferred option for residual waste treatment. But it has made clear its intention to procure anaerobic digestion treatment capacity, acknowledging that the composting facility at Dimmer near Castle Cary is reaching the end of its life.
It is likely that one or two additional recycling facilities would be needed, primarily for treating commercial and industrial waste. Please note: the management capacity of household waste recycling centres (HWRCs) and waste transfer stations has not been included in the calculations on our "need" for recycling facilities. HWRCs and waste transfer stations separate and consolidate waste; they do not recycle (treat) waste to generate a useful by product that can be supplied direct to the market. Residual treatment capacity may come forward in the form of either one large residual waste treatment facility or more than one such facility at a smaller scale.

When asked about the size of treatment facility (large versus small scale), the overall message from the consultation in 2007 was that a mixture of large and small scale facilities should be developed to meet local requirements.

4.2. Treating waste locally

Comments from the 2007 consultation (summarised above) acknowledge that treatment capacity can be delivered in different ways. Linked with this is the concept of self sufficiency, since Somerset does not operate in isolation from its neighbours.

The term self sufficiency can be applied in several different ways in the context of waste planning. In practice these approaches are not mutually exclusive; nonetheless, it is appropriate to touch on what each term means.

In its purest form, self sufficiency entails providing sufficient treatment capacity to process the waste we produce in Somerset. In more practical terms, it is virtually impossible to avoid some cross boundary movement of waste. Acknowledging that some waste is exported and some is imported, net self sufficiency entails providing sufficient treatment capacity to process the equivalent amount of waste we produce in Somerset. Regional self sufficiency implies that capacity is provided at a broader level, acknowledging the benefits of working with other neighbouring counties.

In the Waste Local Plan adopted by Somerset County Council in 2005, policy 4 focused on regional self sufficiency. Currently, significant volumes of waste are currently being exported out of the county for treatment. More information on the destination of municipal waste generated in Somerset can be seen in the SWP’s End Uses Register available from their website: http://www.somersetwaste.gov.uk
What does national policy tell us?

The new Coalition government has made clear its intention for local plans to be driven by local communities rather than regional policy, not least by announcing the abolition of Regional Spatial Strategies. The new Localism Bill reinforces a drive for local communities to play a central part in shaping local plans.

Over half of respondents were in favour of the County Council only making provision for waste that arises in Somerset and over two thirds could see no reason why the County should not be self-sufficient in terms of being able to cope with all the waste it produces.

Comments were also submitted on the need for cross-border arrangements and the need to appreciate the economics of waste management.

A lot has happened since 2007. Two issues are particularly significant in this context.

First, a significant number of planning applications for major waste treatment facilities have been submitted to relevant planning authorities across the south west. If only a proportion of the currently submitted applications are granted permission and built, the regional treatment capacity looks set to increase significantly. In turn this will raise the demand for the region’s waste to feed these facilities and undermine the business case for facilities dedicated to operate at a more local scale. (NB: it can take several years from submitting an application to operation of a facility, adding an extra layer of complexity to this discussion.)

Secondly, the economic recession in late 2008 and the recent drive to reduce the national budget deficit are having a significant impact on investment decisions. The cost of landfill is increasing to support landfill diversion, but the tipping point where alternatives become cheaper will vary depending on the type of technology and scale of facility being implemented. Arguably there is now much less room for speculative investments on more innovative, smaller scale technologies that may end up costing more per tonne to treat waste. Consequently the argument is strengthened for investing in more tested treatment options that in general terms benefit from economies of scale.

The emergence of regionally significant waste management facilities and a trend toward risk-averse investments are at odds with the drive for decentralised waste planning. Recognising this conflict, does the same level of support for self-sufficiency exist in 2011 as it did in 2007? Put another way, should the waste produced in Somerset be treated and disposed of in Somerset; or is it acceptable to export (or indeed import) some wastes if this represents better value for money?
Question 5: Should Somerset plan for self sufficiency in waste treatment?

Option a) We should plan to provide sufficient treatment capacity to process the equivalent total quantity of waste generated in Somerset during the plan period, acknowledging that some waste will always cross boundaries; or

Option b) We should plan to provide sufficient treatment capacity to process the equivalent total quantity of waste generated in Somerset during the plan period, except for waste that requires management at specialised facilities; or

Option c) To make best use of waste as a resource in environmental and economic terms, a proportion may need to be managed at a regional level.

Sustainability Appraisal comments
Option A is likely to lead to a high proportion of waste generated in Somerset being treated locally as sufficient capacity would be provided for locally generated waste. However, some proportion of waste would still be managed outside the county. This could lead to increase in greenhouse gas emissions and other negative effects associated with transporting waste further for treatment. These effects are however dependent on the quantities of waste exported and how far they are transported for management. Acknowledging that some waste movements across borders will happen provides flexibility and reflects the reality of waste movements generally. The challenge for this option would be ensuring that most of the waste arising locally (especially municipal solid waste and commercial and industrial waste) is treated locally in order to manage Somerset’s waste sustainably. This would require investment in new treatment capacity in Somerset. Given the current economic climate, there is a risk that investment may not come forward in the short to medium term meaning a significant proportion of waste is likely to be exported for treatment elsewhere in the short to medium term.

Option B would lead to a high proportion of waste arising in Somerset being managed locally. This would have the benefit of reducing the distance waste travels for management as well as the associated negative environmental effects e.g. air pollution. This option however does not reflect the reality of waste management as it does not acknowledge the potential of some waste (apart from specialised wastes) to be moved across boundaries for management. By restricting movement, this could have a negative effect by for example leading to the landfilling of construction and demolition waste locally while it could be re used elsewhere outside the county. Restricting waste movements could lead to investment in more localised facilities. However, given the current economic climate, this is unlikely to be deliverable in the short to medium term.
Option C reflects the emergence of regionally significant facilities and the current economic climate which is having a significant impact on investment decisions. This option when assessed against options A and B has a higher potential of leading to waste being managed outside the county given the likelihood of significant treatment capacity becoming available elsewhere in the region. While this may present value for money, it has potential for some negative sustainability effects with regard to waste movements and it may also lead to local people not taking responsibility for waste arising locally. This option could also lead to reduced investment in the waste sector in Somerset for municipal solid waste and commercial and industrial waste. However, this option reflects the current economic times and could help deliver a cost effective strategy for Somerset in the short to medium term. In the long term however a sustainable option is likely to be one that allows for waste to be treated closer to where it arises as well as delivering value for money.

4.3. Delivering strategic waste treatment capacity

Somerset County Council has decided to identify zones in the Waste Core Strategy where strategic waste sites could be located. This approach is intended to offer appropriate guidance to the waste industry without limiting the industry's flexibility.

Strategic waste management facilities would process a significant proportion of one or more waste streams associated with the county's development. This is the County Council's broad definition and feedback is welcomed on the implications or elements of this definition.

In spatial terms, a strategic waste site would need to be well located relative to where the waste is generated and have good transport links. The site would be big enough (generally more than 2 hectares in size) or located in such a way as to support the co location of complementary activities.

Potential zones for strategic waste management would not be used to identify suitable locations for new landfills or the 'strategic requirement' associated with radioactive waste management in Somerset. The zones would be used to guide the location of any of the following types of waste management facility.

Material recycling facilities
Recycling takes many forms, varying according to the wastes you need to treat and the outputs you want. An entire recycling facility can be built to treat one waste such as old car tyres. Or a facility can treat a mixture of materials. Separating waste into the different material streams is a valuable first step in preparing waste for recycling; but it should be noted that separating waste is not the same as recycling it.
Large composting facilities
Composting is an age old method for managing organic waste and using this material as a resource. The management of emissions from composting has become increasingly important as population numbers, population density and environmental standards increase. In the composting sector there is a clear trend toward highly controlled, in vessel systems, particularly when operating at a larger scale.

Mechanical biological treatment (MBT) facilities
MBT combines mechanical sorting of recyclable material with organic waste treatment. In this way it provides another way to recover materials and increase the amount of organic waste that local authorities and businesses divert from landfill.

Anaerobic digestion facilities
Anaerobic digestion is a naturally occurring process. During anaerobic digestion, or AD for short, biodegradable waste is digested by bacteria that thrive in the absence of oxygen. AD produces biogas and water. The biogas can be burned to generate electricity and heat; or it can be cleaned and fed into the gas grid or converted into a transport fuel.

The digestate can be separated into solid and liquid fractions; the latter is sometimes termed liquor. The solid fraction can be used directly on land, provided that it meets appropriate regulatory standards, or treated aerobically (where oxygen is present) to improve its compost like characteristics. The liquid part can also be spread to land, again provided that it meets appropriate standards or used to ‘wet’ incoming waste.

Incineration with energy recovery
The standard way to recover energy from waste combustion is to use the heat produced to generate steam via a boiler. The steam is then used to generate power via a steam turbine or for heating if required. Combined heat and power (CHP) plants generate electricity and heat at the same time. Energy from waste facilities are becoming increasingly efficient. There have also been huge advances in the management of emissions from these facilities.

Emerging thermal treatment technologies
There are several emerging options for thermal treatment of waste, such as pyrolysis, gasification and mechanical heat treatment, which are pushing forward the boundaries of waste treatment in the UK.

Pyrolysis is the thermal degradation of waste in the absence of air. Typically pyrolysis takes place at temperatures of between 300°C and 800°C. It produces two main products: a solid residue (sometimes called char) and a synthetic gas known as syngas. Syngas can be used in a steam boiler, the steam from which drives a generator that produces electricity.
Gasification, whilst similar to pyrolysis, is the breakdown of hydrocarbons by carefully controlling the amount of oxygen present i.e. oxygen is present but in controlled quantities. The technology is based on the reforming process that produces town gas from coal. The temperatures tend to be above 650°C and the main product is syngas.

Mechanical heat treatment covers processes that use thermal treatment to clean a mixed waste stream and it supports further recovery of materials. The most common type of mechanical heat treatment for waste is the autoclave.

4.4. Setting the right criteria

Somerset County Council is developing an approach that will help to ensure the need for waste treatment capacity (facilities such as those mentioned above) is met without compromising the county's unique environment.

Approximately two thirds of respondents thought that the management of waste close to where it is produced should be an important planning consideration.

Over half the respondents supported the idea of the County Council offering guidance on what is an acceptable distance for waste to be transported, without necessarily setting a rigid policy on this matter.

There was interest in developing an approach that sets a maximum distance between the location of a new facility and the County’s major roads, though about one fifth of respondents expressed concerns about the suitability or practicality of such a strategy.

Historically, planned growth for Somerset has focused in particular on Taunton, Bridgwater and Yeovil, and to a lesser extent on the county’s smaller market towns. Relatively limited growth has been allocated in the past to the county’s villages and rural areas, aiming to meet local needs only. This strategy of urban concentration is being taken forward in District and Borough planning policy. Consequently the spatial strategy for Somerset’s waste strategy will be shaped primarily by the waste management need arising from existing and proposed new development.

What does this mean in practice? Somerset County Council has taken the following three steps to identify potential zones where strategic waste sites could be located:

Step 1: apply inclusionary and exclusionary criteria;
Step 2: review potential development opportunities in the areas identified in step 1;
Step 3: refine areas of search (zones) based on local knowledge and deliverability.
Step 1: Apply inclusionary and exclusionary criteria
What do we mean by inclusionary and exclusionary criteria? In short, this means including and excluding certain areas of Somerset based on the results from prior consultation and government guidance.

Beginning with inclusionary criteria, Somerset County Council has identified two main options for consideration, both of which are shaped by the above proximity principle.

<table>
<thead>
<tr>
<th>Inclusionary criteria</th>
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<tbody>
<tr>
<td><strong>OPTION A</strong></td>
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<tr>
<td>Within, on the edge or in close proximity (within 21km) ² of Bridgwater, Taunton or Yeovil;</td>
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</tbody>
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For both options A and B, it was decided that the areas of search should be well served by the county’s strategic transport network. As a result, the areas of search were shaped by proximity to the county’s strategic transport network. This was deemed to be within 2km of national and county freight routes and rail lines.

The outcomes of applying the inclusionary criteria are shown in maps 1 and 2 below. The dark shading in maps 1 and 2 represents the areas close to the towns for each option and the lighter bands show the areas refined along transport corridors. NB: those interested in only the results (potential zones) may wish to skip to page 23.

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² 21 km is the average distance travelled by waste for disposal in Somerset, calculated during work done on the County Council’s minerals and waste annual monitoring reports between 2004 and 2009.
³ 10.5 km is half the average distance travelled by waste for disposal in Somerset, which reflects a more decentralised approach.
⁴ These are the towns identified as centres for development in the Somerset and Exmoor National Park Joint Structure Plan Review 1991  2011
Map 1: Initial area covered by Option A

Map 2: Initial area covered by Option B
Having set the inclusionary criteria, the County Council also applied exclusionary criteria that are largely set nationally.

<table>
<thead>
<tr>
<th>Natural Environment</th>
<th>Built Environment</th>
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<tbody>
<tr>
<td>Special Areas of Conservation (SAC)</td>
<td>Scheduled Monuments</td>
</tr>
<tr>
<td>Special Protection Area (SPA)</td>
<td>Registered Historic Battlefields</td>
</tr>
<tr>
<td>Sites of Special Scientific Interest (SSSI)</td>
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<tr>
<td>RAMSAR Sites</td>
<td></td>
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<tr>
<td>Ancient Woodland</td>
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<tr>
<td>National Parks</td>
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<td>National Nature Reserves</td>
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<tr>
<td>Areas of Outstanding Natural Beauty (AONB)</td>
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<tr>
<td>Flood Zone 3b</td>
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</tbody>
</table>

The exclusionary criteria helped to shape the areas of search as shown in maps 3 and 4 below.
Map 3: Option A shaped by exclusionary criteria

Map 4: Option B shaped by exclusionary criteria
Step 2: review potential opportunities
Having applied both inclusionary and exclusionary criteria, Somerset County Council needed to consider whether the areas identified in Maps 3 and 4 above contained potential opportunities for locating a strategic waste site. As a result, it reviewed factors such as:

- existing waste sites;
- employment sites and allocations;
- vacant and undeveloped sites;
- derelict land and building; and
- historic landfill sites.

Potential zones were then proposed where there were believed to be a concentration of such opportunities that fit with the earlier description of strategic waste sites. These zones are shown in maps 5 and 6 below.

As can be seen, this approach has yielded four zones for Option A linked with Bridgwater, Taunton, Yeovil and Street & Glastonbury. The Street & Glastonbury (combined) zone is included in Option A because that lies inside the 21 km radius identified in the earlier criteria.

Six zones are generated for Option B, including the four identified for Option A plus a new zone in Wells and one in Frome.

Please note!
It is important to note that Option A would not automatically translate into four waste treatment facilities and Option B six facilities. In other words, the proposed approach does not entail identifying one facility to serve one centre of population. The approach is used to identify broad locations where strategic waste management could be appropriate. Strategic facilities will have countywide implications.
Map 5: Zones for Option A

Key:
- Somerset County boundary
- Potential Area of Search
- Area of Search Zones
- Zone A: Bridgwater
- Zone B: Taunton
- Zone C: Yeovil
- Zone D: Street and Glastonbury

Map 6: Zones for Option B

Key:
- Somerset County boundary
- Potential Area of Search
- Area of Search Zones
- Zone A: Bridgwater
- Zone B: Taunton
- Zone C: Yeovil
- Zone D: Street and Glastonbury
- Zone E: Wells
- Zone F: Frome
Question 6: do you think zones should be identified by Option A (proximity to Taunton, Bridgwater and Yeovil) or Option B (proximity to a wider network of towns)?

a) I support Option A because....
b) I support Option B because....
c) I don't support either, because.....

Sustainability Appraisal comments
Overall, given that strategic waste facilities are designed to process a significant proportion of waste from around the county, option A is assessed as having the potential to deliver a more sustainable strategy than option B.

4.5. Do you have any comments on the potential zones?

The six potential zones are described in more detail below, including environmental constraints and the potential development opportunities available. The tables below summarise detailed research that forms part of the evidence base supporting the development of the waste core strategy. The evidence base is available via the Somerset County Council website: www.somerset.gov.uk/mineralsandwaste

Question 7: do you have any comments on any of the six potential, proposed zones?

Sustainability Appraisal comments
Sustainability Appraisal of the six potential, proposed zones arguably suggests that Zones A and B offer the greatest potential to deliver a strategic waste management facility in a sustainable manner.

Zone C has potential to deliver a strategic waste management facility in a sustainable manner for waste generated in Yeovil and areas close to the south of the county. But it is not so well located for waste generated across the whole of the county.

Zone D is located centrally within the county with good access via road. However, a significant proportion of the county's waste is generated elsewhere in the county.

Zones E and F are located towards the edge of the county, relatively distant from where most of the county's waste is generated. As such, Zones E and F are unlikely to deliver a sustainable waste management spatial strategy for Somerset.
**Zone A**
The majority of this zone is located to the north of the town of Bridgwater, which itself is located in the central part of the Somerset County Council administrative area.

### Strategic potential

Zone A is centrally located in terms of its position in the wider administrative area of Somerset. It is also reasonably located in terms of its ability to serve two of the main centres of population in Somerset (Bridgwater and Taunton). Given that the zone is largely centred on the northern side of the town, it is also potentially well positioned to serve the needs of Minehead. Consequently, development of a strategic waste management facility in Zone A would allow waste to be managed close to its point of production.

The area is well connected to the strategic road network: the zone is divided into two by the M5 motorway and a number of strategic roads also pass through and/or alongside the zone (namely the A38, A39 and A372). There may also be potential for alternative modes of transport that warrant further investigation, including consideration of an operational wharf at Dunball.

### Constraints

The location of a strategic waste facility in Zone A is likely to be constrained by flooding considerations since much of the area lies in Flood Zone 3a. A site of international and national significance (Ramsar, Special Protection Area and Site of Special Scientific Interest) is located west of the zone. Any development in the southern part of this zone, which has a high concentration of residential properties, may also be required to be robustly designed to ensure that the amenity of existing residents is protected.

### Opportunities

There are a number of existing waste management facilities across the zone; however, these are located within Flood Zone 3a which may limit the potential of these sites to accommodate new development. The Walpole landfill site already provides significant waste management capacity for Somerset and has good transport links and planning permission for anaerobic digestion development; consequently, it may be worth considering its future strategic potential in more detail. It may also be appropriate to consider the Saltlands historic landfill site in more detail, though remediation is likely to be required and consideration should be given to any future expansion of the sewage works and safeguarding of land for the future Parrett Barrier.

The incidence of previously developed / vacant and derelict land across the zone appears to be limited and those opportunities that are presented are constrained by virtue of being located within Flood Zone 3a. That said, a number of potential development opportunities have been identified through the Sedgemoor District Council Employment Land Review (2009). The former Royal Ordnance Factory at Puriton is available for development and has been allocated in Sedgemoor’s emerging Local Development Framework Core Strategy as being a suitable location for an Energy Park. There is potential for development of a waste management facility to complement this concept and the site may also present an opportunity to utilise a disused railhead to facilitate the transportation of waste. Other potential sites include land north of Express Park, plots within in the Colley Lane Industrial Estate and land at Dunball Drove.
### Zone B

This zone is located in central and northern Taunton, which itself is located in the central southern part of the Somerset County Council administrative area.

#### Strategic potential

Zone B is centrally located in terms of its position in the wider administrative area of Somerset. It is also reasonably located in terms of its ability to serve two of the main centres of population in Somerset (Bridgwater and Taunton). Given that Taunton is one of Somerset’s main centres of population, it is a locality which generates significant quantities of waste. By developing a strategic waste management facility in Zone B, this would allow waste to be managed close to its point of production.

A number of strategic roads pass through and/or alongside the zone, namely the M5, A38, A356, A3065 and the A3259. Furthermore, there may be potential to consider using alternative modes of transport i.e. rail, river or canal. Notably the area is bisected by the London Exeter mainline railway and the River Tone and Bridgwater Canal pass through part of the zone.

#### Constraints

Located in an existing urban area, Zone B has few (designated) environmental constraints; however, there are a number of nature conservation considerations including Hestercombe House ‘Special Area of Conservation’, which is designated for its maternity colony of lesser horseshoe bats, and potential downstream effects on water quality entering the Curry and Hay Moor ‘Site of Special Scientific Interest’ (SSSI).

The existence of a significant number of residential properties within the zone would require any proposals for a strategic waste management facility to be appropriately located and robustly designed to ensure that the amenity of existing residents is protected.

#### Opportunities

There are nine existing waste management facilities across the zone, some of which coincide with vacant / derelict land and existing employment allocations. Consequently, there would appear to be some scope for the co-location of waste management facilities. Of these sites, Priorswood is considered to offer the greatest potential for development. This site is already home to various waste uses and is allocated in the Taunton Deane Local Plan for B class use.

Zone B initially appears to offer significant scope for a new strategic waste management facility to be located upon previously developed land; however, it is understood that a number of sites are no longer available and the impact of the planned Northern Inner Distributor Road on potential opportunities also needs to be considered in greater detail. The zone includes areas of the town which are expected to accommodate significant development over the next 16 years including Firepool and Monkton Heathfield and this wider context of growth will need to be fully considered in relation to opportunities for development of a strategic waste management facility.
### Zone C

The majority of Zone C is located in the western part of Yeovil, which itself is located in the south eastern part of the Somerset County Council administrative area. NB: the solid line represents the County boundary.

<table>
<thead>
<tr>
<th>Strategic potential</th>
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</thead>
<tbody>
<tr>
<td>Zone C is not centrally located in terms of its position in the wider administrative area of Somerset. Nevertheless, it is reasonably located to serve one of the main centres of population in Somerset (Yeovil). Given that Yeovil is one of Somerset’s main centres of population, it is a locality which generates significant quantities of waste. By developing a strategic waste management facility in Zone C, this would allow waste to be managed close to its point of production.</td>
</tr>
<tr>
<td>There is no clear potential for any new waste management facility to use alternative modes of transport, i.e. rail, river or canal. Nevertheless there is good access to the strategic road network via the A3088, which connects with the A303.</td>
</tr>
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<table>
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<tr>
<th>Constraints</th>
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<tbody>
<tr>
<td>Located in an existing urban area, Zone C has few (designated) environmental constraints. However, there is a section of land within Flood Zone 3b to the south bisecting the Lynx West Trading Estate and the zone itself lies within the Yeovil Air Quality Management Area designated in 2002. The existence of a significant number of residential properties within the zone would require any proposals for a strategic waste management facility to be robustly designed to ensure that the amenity of existing residents is protected.</td>
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<tr>
<th>Opportunities</th>
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<tbody>
<tr>
<td>There are only three existing waste management facilities across the zone and four existing employment sites, only one of which coincides with vacant / derelict land. As such, there would appear to be limited scope for the co-location of waste management facilities within this zone.</td>
</tr>
<tr>
<td>There may be an opportunity to supply energy resulting from waste management processes to Agusta Westland, a major industrial company located off the A0388 to the south of the zone. Land south of Yeovil Airfield should be considered further in this context and has been allocated for B1 (light industrial), B2 (industrial) and B8 (warehousing) use – though consideration will need to be made regarding the proximity of this site to the airfield. Land at Lufton to the north of the zone also has outline permission for B1, B2 and B8 use though it is understood that the site is considered to be a key employment site and as such development of a waste management facility may not be favoured in this area.</td>
</tr>
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</table>
Zone D

Zone D is predominately located within the small town of Street in the centre of the Somerset County Council administrative area and extends north to encompass the southern edge of Glastonbury.

### Strategic potential

Zone D is centrally located in terms of its position in the wider administrative area of Somerset. It is also reasonably well located in terms of its ability to serve the three of the main centres of population in Somerset (Bridgwater, Taunton and Yeovil). Both Street and Glastonbury are relatively small settlements with only limited industrial and commercial activity and as such, is likely to generate only a small portion of Somerset’s overall waste arisings.

There is scope to ensure that any strategic waste management facility would be easily accessible via road, bisected by the A39.

### Constraints

As the majority of the Zone D is located in existing urban areas, it has few (designated) environmental constraints. That said, a significant proportion of the northern and western parts of the zone lie within Flood Zone 3b and any waste proposal would need to take account of both identified nature conservation issues (such as possible downstream effects on water quality entering the Shapwick Heath Site of Special Scientific Interest) and the sensitivity of the built environment in view of archaeological and Conservation Area designations within the zone.

There are a significant number of residential properties within the Street part of the search area which would require any proposals for a strategic waste management facility to be robustly designed to ensure that the amenity of existing residents is protected.

### Opportunities

Although there is a small household waste recycling centre located in the northern part of the search area, this is located on the site of a historic landfill and is not considered suitable for development of a strategic waste management facility.

Morland Enterprise Park is considered to offer significant potential and would appear to have a number of available plots of sufficient size to accommodate a strategic waste management facility, although some demolition work and remediation may be required to facilitate development. Given the high profile of the Morland Enterprise Park, there may be opportunities to explore the supply of energy resulting from waste management processes. Whilst it is considered that the Morland Enterprise Park offers the greatest opportunity for the development of a strategic waste management facility in Zone D, there may be other opportunities worthy of further exploration too, such as the employment allocation at Gravenchon Way which would offer good access to the A39.
Zone E

Zone E is located within the city of Wells, which itself is located in the north eastern part of the Somerset County Council administrative area, within Mendip District.

<table>
<thead>
<tr>
<th>Strategic potential</th>
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<tbody>
<tr>
<td>Zone E is peripherally located in terms of its position in the wider administrative area of Somerset. In this context, should a strategic waste management facility be developed in this locality, it is likely that waste would need to be transported over significant distances from the main centres of population (Taunton, Bridgwater, Yeovil and Minehead). This in itself has wider sustainability and environmental implications. Zone E would therefore not facilitate the management of waste close to its point of production.</td>
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<tr>
<td>The zone is well located to the strategic road network, in particular the A39 and A371.</td>
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<th>Constraints</th>
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<tr>
<td>Zone E contains few (designated) environmental constraints, though the rural fringes of Wells are utilised by commuting and foraging greater horseshoe bats for the North Somerset and Mendip Bats 'Special Area of Conservation'. Flood Zone 3b occurs around the route of the River Axe, which flows through the western part of the zone and the zone contains a 'Source Protection Zone' in its south eastern corner. The Mendip Hills Area of Outstanding Natural Beauty extends into the northern edge of the zone which may preclude development in some areas in view of landscape impacts. With respect to the built environment, parts of the zone are particularly sensitive and development would be required to respect the historic city of Wells.</td>
</tr>
<tr>
<td>The existence of a significant number of residential properties within the eastern and southern parts of the search area would also require any proposals for a strategic waste management facility to be robustly designed to ensure that the amenity of existing residents is protected.</td>
</tr>
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</table>

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<thead>
<tr>
<th>Opportunities</th>
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<tbody>
<tr>
<td>There are no existing waste management facilities in Zone E, though planning permission has been granted for a new waste treatment facility (named WP2 or the &quot;Haybridge&quot; plant) which in itself would offer a significant contribution to residual waste treatment capacity in Somerset. The opportunities for the co-location of waste within this locality are currently limited.</td>
</tr>
<tr>
<td>Zone E has some limited scope for accommodating a strategic waste management facility on derelict sites/existing employment allocations in the south eastern part of the area which is well connected to the strategic road network i.e. A371 and A39. Potential sites in this locality include Clares, Gate Lane and Nutricia Wells though careful consideration would need to be given to the impact of development in this area upon residential receptors and the historic city of Wells as well as flood risk including from surface water flooding.</td>
</tr>
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</table>
### Zone F

Zone F is located in the town of Frome, which itself is located in the north eastern part of the Somerset County Council administrative area. NB: the solid line represents the County boundary.

<table>
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<tr>
<th>Table Title</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Strategic potential</strong></td>
<td>Zone F is located in the eastern edge of Somerset. In this context, should a strategic waste management facility be developed in this locality, it is likely that waste would need to be transported over significant distances from the main centres of population (Taunton, Bridgwater, Yeovil and Minehead). This in itself has wider sustainability and environmental implications. The development of a strategic waste management facility in Zone F would not facilitate the management of waste close to its point of production. The zone is relatively well connected to the strategic road network via the A361 and the A362. In addition, there may also be potential for any new waste management facility to use alternative modes of transport i.e. rail or river, noting in particular that the Reading Exeter railway forms the eastern boundary of the area.</td>
</tr>
<tr>
<td><strong>Constraints</strong></td>
<td>Located in an existing urban area, Zone F has few (designated) environmental constraints. However, there are various environment considerations which would need to be considered. For instance, Flood Zone 3b occurs around the route of the River Frome, which travels through the south eastern part of the zone; and areas around the northern fringe of Frome provide ecological support to a population of greater horseshoe bats from Mells Valley Special Area of Conservation. The existence of a significant number of residential properties within the zone would require any proposals for a strategic waste management facility to be robustly designed to ensure that the amenity of existing residents is protected.</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>There are only two existing waste management facilities across the zone including Cliniserve that forms part of the Coalway Lane employment allocation to the north within which there may be land available for development. Consequently there is some opportunity for the co-location of waste within this zone. Elsewhere, the Marston Trading Estate/Wessex Field may be suitable for development and a site off Station Road may also be worthy of further examination, though in both cases the availability of land needs to be ascertained.</td>
</tr>
</tbody>
</table>
4.6. Other potential locations

Somerset County Council wishes to ensure that, as far as possible, it has considered all suitable locations for strategic recycling or residual waste treatment within the county. Consequently the County Council asks stakeholders if they are aware of any other potential areas for developing such facilities in Somerset.

**Question 8:** Are there any areas in Somerset outside those identified that you think should be considered for strategic waste development? Please give your reasons.

4.7. Delivering non-strategic waste treatment capacity

The approach outlined in this chapter has focused primarily on identifying potential zones where strategic waste sites could be located. This will form a core part of the Waste Core Strategy.

Somerset County Council also needs to manage applications for non-strategic waste facilities, which might include (for example) community-scale waste treatment facilities, transfer stations, household waste recycling centres, on-farm composting sites and facilities for aggregate recycling.

The County Council proposes that non-strategic waste facilities could be located in the zones identified or elsewhere in the county assessed against location principles that are covered in the following chapter on development management. The basic location principles would be used to assess planning applications for both strategic and non-strategic applications.
5. Development management

5.1. Assessing new applications: basic location

When reviewing an application for a recycling or residual waste treatment facility in Somerset, the County Council will need to ensure it uses appropriate criteria for assessing the quality and potential impact of the application. The County Council has drafted the following location principles that would be used to manage all applications for recycling or residual waste treatment in Somerset.

Basic location principles
Waste treatment facilities should be well located to serve existing and new settlements, thereby applying the proximity principle and minimising the distance to be travelled by waste. Exceptions can be made where it can be shown that the by-products from waste treatment (materials or energy) will be effectively used by a neighbouring facility or business.

Somerset County Council favours the following locations (in no order of preference):

- existing waste management sites, provided that the colocation of facilities is shown to yield operational and environmental benefits;
- land in existing general industrial use (B2 use class) or in existing storage and distribution class (B8 use class);
- land allocated for B2 and B8 purposes in a Local Plan or Development Plan Document; and
- previously developed land.

There will be a presumption against use of unallocated greenfield land unless the application is temporary, small scale and for beneficial use.

Question 9: do you support the proposed basic location principles?

a) Yes, because...
b) No, because ...
c) Additional principles should be considered, which include...
5.2. Assessing new applications: impacts criteria

Having considered the basic principles for location, the County Council will need to consider the planning application in greater detail against a set of criteria that help to assess the likely impacts of the proposal. Proposed criteria are listed below.

The need for the development
The need for the proposed development should be clearly demonstrated associated with the waste generated in Somerset.

Biodiversity and the natural environment
The potential impact of the proposed development on:

I. sites of local, national and international importance for nature conservation, including but not limited to Sites of Special Scientific Interest, National Nature Reserves, Special Protected Areas, Special Areas of Conservation, RAMSARs, ancient woodlands, local nature reserves and local Biodiversity Action Plan habitats;

II. the public rights of way network;

III. agricultural land, including soil quality;

IV. regionally important geological sites; and

V. land stability.

The landscape character
The potential impact of the proposed development on the local landscape character, including but not limited to:

I. local archaeological and historic built heritage, including but not limited to scheduled ancient monuments, listed buildings, the historic landscape, archaeological sites and registered historic battlefields;

II. local and national landscape designations such as Areas of Outstanding Natural Beauty and National Parks; and

III. visual amenity.

Carbon management
Mitigating against the causes of climate change, by:

I. creating opportunities for sustainable modes of travel for potential employees;

II. consideration of alternative ways of transporting waste, such as rail or water based transportation;

III. the potential for on site management of waste, for local use to be made of any power and/or heat generated from the proposed development; and

IV. overall carbon footprint of the proposed development including energy use and generation.
Transportation
The potential impact of the proposed development on Somerset’s transport network, including:

I. consideration of access requirements;
II. the proximity and availability of public transport for staff;
III. the impact on the network in the surrounding area; and
IV. consideration of practicable alternatives to road for waste transport.

Health and quality of life
The potential impact of the proposed development on the health and quality of life of the neighbouring population, including:

I. air quality (encompassing odour and dust);
II. artificial lighting;
III. noise and vibration generated through increased traffic and site operation;
IV. the possible cumulative effects of waste disposal facilities; and
V. access issues, including rights of way.

Water resources
The potential impact of the proposed development on Somerset's water resources, including but not limited to:

I. ground, surface and coastal water quality;
II. the presence of groundwater protection zones;
III. volumes, direction and rates of flow of ground and surface water; and
IV. flood management issues.

Site management
Any other site management issues, including but not limited to:

I. litter, vermin and birds;
II. minimising impacts during construction, in particular linked with the stockpiling of materials; and
III. the decommissioning of the proposed development when its operational life ends and the subsequent restoration of land.
Question 10: do you support the proposed criteria for managing applications for recycling and residual waste treatment facilities?

a) Yes, because...
b) No, because ...
c) Additional criteria should be considered, which include...

5.3. Criteria to restrict landfilling

Currently Somerset has two major landfills for disposal of non-hazardous material: Walpole near Bridgwater and Dimmer near Castle Cary. Recent research indicates there is sufficient capacity at these sites to meet the county’s requirements for non-hazardous landfilling throughout the plan period (until 2028).

Somerset also has two main landfills for inert waste disposal, namely Lime Kiln near Frome and Whiteball near Wellington. The two sites have limited planning life remaining, though they may have additional void space available beyond the current planning end date. The landfill sites at Walpole and Dimmer also use inert material for engineering works. A report on waste management need to 2028 (available for download from the County Council website) estimates the need for inert landfill. According to this research, a total of between 314,000 and 477,000 m³ of additional capacity will be needed by the end of 2015 to cater for inert landfill requirements until the end of the plan period.

Somerset County Council proposes not to allocate any new landfill sites in the Waste Core Strategy or encourage the development of new landfills in Somerset during this period. The focus will be on maximising the diversion of waste from landfill. If applications for new landfills are submitted to the County Council they will be considered against agreed criteria.

IN 2007, YOU SAID

58% of respondents accepted the conditions listed in the Issues and Options consultation, which would be applied by Somerset County Council if it identified a need for new landfill sites to dispose of waste. In other words, a majority support measures to restrict the development of new landfills in Somerset.

Informed by the issues and options consultation undertaken in 2007, Somerset County Council proposes the following criteria for managing new applications. In line with the "need" mentioned above, any such applications are most likely to be associated with inert landfill.
Landfill criteria
Planning permission will not be granted for landfill development unless it can be shown that:

a) there is a clearly defined need for the landfill; and

b) the proposed development will not cause unacceptable damage to the environment or neighbouring communities, including (but not limited to) visual amenity, access and water resources.

Non inert landfills may be considered only where it can be shown that the waste cannot be managed in a more sustainable way or where the proposal is linked with the restoration of an existing landfill.

Inert landfills, including the use of mineral voids, may be considered only where: the proposal is restoration led, enabling an area of land to be used for another purpose such as to build houses, industrial areas or farming; the proposal deposits inert waste only; and the proposal uses the minimum amount of waste to achieve the stated purpose.

Temporary stockpiling of inert waste on major development projects may be allowed for up to one year. Any extension to such stockpiling should be agreed with the Environment Agency informed by the timeframe of the extant planning permission.

Question 11: do you support the proposed criteria for managing landfill applications?

a) Yes, because...
b) No, because ...
c) Additional criteria should be considered, which include...
5.4. Maximising the recovery of inert and C&D waste

Inert waste is waste that does not undergo any significant physical, chemical or biological change. A large proportion of construction and demolition (C&D) waste is inert e.g. rubble.

Inert waste can be used to create new landform features such as screenbanks and access tracks and to raise the level of the land, potentially making it suitable for other uses. The Environment Agency regards such activities as ‘recovery’ of waste only where there is a clear and demonstrable benefit from the proposals and the volume of waste used is the minimum necessary to achieve the purpose. If these requirements are not met the deposit of waste would be regarded as landfill disposal.

The current capacity for recovering inert waste at exempt sites in Somerset is thought to be substantial, though it is hard to define this capacity accurately. Exempt status means that the site does not require a waste management permit from the Environment Agency to operate. From October 2011 onwards, many sites that are currently exempt will require a permit to continue operating. This change should help to maximise the reuse of material of inert waste.

The Waste Core Strategy policy on inert landfilling should help to move the management of inert materials up the waste hierarchy. Once the Waste Core Strategy is adopted, the County Council's Site Allocations document may need to look more closely at requirements for inert waste / aggregate recycling facilities across the county to further support the recovery of inert materials in Somerset.

Waste arising from new development

Somerset’s Waste Local Plan includes a policy on waste arising from new development, namely construction and demolition waste (or C&D waste for short). The Local Plan policy aims to minimise waste production, maximise the reuse of waste and manage and residual waste material in accordance with the principles of sustainable development. It states that when considering planning applications for any form of development which will generate significant quantities of waste, planning permission should not be granted unless the proposals include details of the means which will be used to manage that waste and those details are acceptable to the determining authority.

In April 2008, the UK Government introduced the Site Waste Management Plans Regulations 2008, which provide a financial threshold above which Site Waste Management Plans (SWMPs) are required. These regulations require any client who intends to carry out a project on any one construction site with an estimated cost of greater than £300,000 excluding VAT to prepare a SWMP conforming to the SWMP Regulations before construction work begins. Additional requirements are imposed on projects where the estimated cost is over £500,000 (excluding VAT). Failure to comply with the regulations is an offence.
In 2007, you said…

Almost three quarters of written respondents supported the idea of requiring developers to submit waste management plans that state how the waste that is produced during construction of a development will be managed. A proportion of this group supported such a policy only for developments above a certain size.

Informed by the issues and options consultation 2007, Somerset County Council can support improved construction and demolition waste management by referring to the scale of the development. Somerset County Council is considering stating that the level of detail on plans for site waste management should be in proportion with the scale of development. The following thresholds are proposed, above which the County Council would seek more information from the applicant.

Thresholds for supplying information on site waste management

- A site waste management statement would be needed for minor development not covered by a site waste management plan.
- A site waste management plan would be needed for 10 or more dwellings or where the floor space to be created by the development is 1000m² or more.
- A site waste management strategy would be needed for large scale major projects, including more than 200 dwellings or where the development covers more than 10,000 m², or for multi site projects within the same application. A site waste management strategy should set the criteria to which detailed site waste management plans for the development should adhere. This enables more than one site waste management plan to be written for the project according to a standard model, thus supporting a phased approach to delivery of the development.

Question 12: Do you have any comments on maximising the recovery of inert and C&D waste?

5.5. Eco development

Housing and employment growth in Somerset over the plan period will include urban extensions at Taunton and Yeovil which have been conceived as achieving exemplar environmental standards in design and delivery. As such they are intended to provide low carbon development through high quality masterplanning, building design and construction materials.
Waste management infrastructure needs to be integrated into the planning and design of these areas which, between them, are expected to account for over 10,000 new homes and so have the potential to have a significant effect on waste arisings in the County overall and focused on these urban centres in particular. Large scale mixed use development is also taking place at North East Bridgwater.

Development of the scale of these urban extensions provides a valuable opportunity to plan for integrated waste management infrastructure, which may be difficult to deliver viably at smaller scales and is often difficult to retrofit to existing urban areas.

Waste infrastructure is needed to allow new areas of development to be serviced in a way that helps to drive waste recycling performance upward and thus divert more waste from landfill. This includes provision of convenient space and facilities for household waste segregation (both inside new homes and in housing layouts) and ensuring that the development pattern and roads provide for effective movement of recycling and refuse collection vehicles throughout. Provision for local recycling facilities and potential for local waste treatment/disposal should also be considered. Focusing on the latter, one of the most challenging aspects will be balancing the desire to integrate facilities at an appropriate scale for the development whilst still being commercially viable.

It is important to note that such plans need to consider business waste as well as municipal waste. New employment areas are planned in the proposed urban extensions which will generate commercial and industrial waste arisings. It will be important that effective provision for waste segregation and recycling is made in commercial development layouts since this is a key area of use where recycling standards must be improved in the coming years. This is highlighted in a report on commercial and industrial waste published on the County Council website: www.somerset.gov.uk/mineralsandwaste

**Question 13: Integrating waste infrastructure in new development.**

a) Do you agree that urban extensions and other large areas of new development should include integrated waste management facilities?

b) Do you have any comments on the types of waste management infrastructure that should be provided within new housing and commercial areas?

c) Where development has been conceived as ‘eco development’ do you think there is an opportunity for exemplar standards of waste management infrastructure or do you think that the highest standards should be sought for all new development?
6. Other waste streams

6.1. Radioactive waste

Radioactive waste is a substance or article containing a radioactive element. Radioactive waste is classified depending on the level of radioactivity.

By far the largest category by volume is Low Level Waste (LLW) and its subcategory Very Low Level Waste (VLLW), representing about 90% by volume of all radioactive waste in the UK. LLW and VLLW are generally made up of everyday materials such as plastic, glass and paper that have come into contact with radioactive liquids or powders. Some of these wastes, providing they meet certain requirements, can be sent to treatment facilities and/or landfills that hold a special permit supplied by the Environment Agency (under the Environmental Permitting Regulations 2010).

Intermediate Level Waste (ILW) arises mainly from the reprocessing of spent fuel and from general operations and maintenance of nuclear sites. This category of waste makes up about 10% of all radioactive waste in the UK.

High Level Waste (HLW) arises in the UK as a highly radioactive liquid. It is generated in small quantities and is a by-product from the reprocessing of spent nuclear fuel.

Various issues need to be considered regarding the treatment and disposal of radioactive waste, not least the location of appropriate facilities. The proximity principle applies to radioactive waste management, as it does to the management of other waste. It is desirable for the treatment and disposal of radioactive waste to occur as close to the point of generation as possible, thus avoiding ‘waste miles’ and associated carbon emissions. In addition it should be noted that radioactive waste is classified as a dangerous good (Class 7/9) under European regulations and, as such, the transport of this material is tightly controlled. However, it should also be noted that there are only a limited number of facilities in the UK licensed to accept radioactive waste; so this is clearly a complex issue.

Radioactive waste in Somerset is produced primarily from Hinkley Point. Other facilities such as hospitals, universities or military installations can hold or produce very small amounts of material, which tends to be VLLW, linked with the nature of their activities.
Hinkley Point
Hinkley Point A (in West Somerset) is in the process of being decommissioned, which will give rise to a quantity of Very Low and Low Level wastes.

Hinkley Point B is an operational nuclear power station which is currently licensed to produce electricity until 2016. Whilst operating, this facility will produce ILW that requires treatment and interim storage and Very Low and Low Level wastes (in smaller quantities than would be generated during decommissioning).

At present, the Government is demonstrating strong support for a new generation of nuclear power plants in the UK. Hinkley Point in Somerset has been identified as a preferred site by central government for new nuclear development. Plans for Hinkley C are being led by EdF. Readers can find more information on plans for Hinkley C from the following website: http://hinkleypoint.edfenergyconsultation.info/

Managing Low Level radioactive Waste in Somerset
The waste hierarchy applies to radioactive waste management, as it does to the management of other waste streams. Indeed, the national strategy for managing LLW developed and implemented by the Nuclear Decommissioning Authority (a Governmental organisation) advocates dealing with LLW as far up the waste hierarchy as possible. Moving up the waste hierarchy can be difficult, noting the nature of the waste and the dispersed nature of appropriate treatment and disposal facilities in the UK. Currently the Hinkley B nuclear power station makes use of dedicated on site facilities to manage and store some of the waste it produces.

Low level waste from Hinkley Point has traditionally been sent to the LLW Repository in Cumbria. This facility has limited capacity for future arisings of this waste type; and, as mentioned on the previous page, national policy advocates managing waste in the nearest appropriate facility (which could be a considerable distance from the site of the arisings).

Managing Intermediate and High Level radioactive Waste in Somerset
As part of its operation, Hinkley Point B produces ILW and spent fuel. These wastes are currently stored in specially designed facilities pending the availability of a national deep level geological repository. This repository is a central Government led project and more information can be found http://www.nda.gov.uk/ukinventory/waste/long_term_waste_higher.cfm.

There is also an extant planning permission on the Hinkley Point A site for an ILW store should the need arise.

At the present time, it is likely that EdF (as owners of Hinkley Point B and proposed developers of Hinkley Point C) will require additional storage capacities on site for the long term interim storage of these waste types.
Somerset radioactive waste policy
Central government has determined that new nuclear power stations such as Hinkley Point C should make on-site provision for the waste which arises during the operation to be stored on-site until a geological disposal facility is available.

The Waste Local Plan for Somerset County Council includes two policies on radioactive waste management, which state that whilst Hinkley Point may be an appropriate location for the management of its own waste it is not appropriate to import or store waste from other locations and facilities.

IN 2007, YOU SAID

42% of respondents accepted the idea of developing a storage or disposal capacity at Hinkley Point for low level and intermediate level waste that is produced at Hinkley Point, almost three times as many as those who rejected this idea.

74 respondents (over 50% of respondents) thought that such waste should not be imported from outside the County without a full and transparent justification, almost six times as many as those who thought waste importation should be considered.

Informed by the consultation undertaken in late 2007, Somerset County Council proposes the following policy approach to radioactive waste management.
Proposed approach for radioactive waste management

Facilities for the treatment and interim storage of radioactive waste generated at Hinkley Point will be acceptable within the licensed area where:

- this is consistent with national strategy for radioactive waste management; and
- the proposed facilities are located and designed in order to minimise adverse impacts of the environment; and
- the impacts of economic and environmental assessments justify the case.

Only radioactive waste generated at Hinkley Point shall be treated or stored at Hinkley Point.

Proposals for treatment or interim storage of radioactive waste within the licensed area at Hinkley Point will need to be considered against the general impacts criteria (listed in the Development Management section of this document).

Question 14: Radioactive waste management in Somerset.

a) In 2007, over 50% of respondents thought that radioactive waste should not be imported from outside the County without a full and transparent justification. Do you support this view?

b) Do you agree that only radioactive waste generated at Hinkley Point should be treated or stored at Hinkley Point?

c) Do you think it reasonable to allow intermediate level waste and spent fuel to be treated and stored at Hinkley Point pending its long term disposal at a suitable radioactive waste geological repository?
6.2. Waste water (sewage)

Most waste water (sewage) treatment facilities are relatively small. Nonetheless they remain an important part of community infrastructure.

Wessex Water is the main operator for waste water treatment in Somerset. In 2008/09, five sewage treatment works operated by Wessex Water produced more than 1000 tonnes of dried sludge.

The demand for waste water treatment capacity is closely linked with the size of the local population. Wessex Water anticipates sludge production increasing by less than 1% per year. It is reasonable to expect that additional facilities will be required (either new facilities or expanded existing facilities) during the plan period. Noting this and the unique characteristics of waste water treatment, it is appropriate for Somerset County Council to use a bespoke set of development management criteria for handling related applications, informed by more general considerations.

Criteria for waste water treatment facilities

Permission for waste water treatment facilities will be granted providing that the application does not give rise to unacceptable impacts on the environment or neighbouring communities. In particular, applicants will need to show give consideration to the following factors:

- availability of connecting transport networks to accommodate vehicle movements;
- avoiding the unnecessary use of unallocated greenfield land or areas at risk from flooding;
- the potential for co-digestion of sewage sludge with other organic material;
- residential visual amenity, noise and odour; and
- links to existing sewerage infrastructure and access to a suitable outlet for discharge of treated water, recognising the need to minimise pumping.

Question 15: do you support the proposed criteria for managing waste water applications?

a) Yes, because...

b) No, because ...

c) Additional criteria should be considered, which include...
6.3. Hazardous waste

According to information supplied by the Environment Agency and industry operators, two landfill sites in the county currently take hazardous waste (primarily asbestos). These are the Walpole and Dimmer landfill sites. Though the Walpole and Dimmer sites are regarded as non-hazardous landfill, they have special facilities for managing hazardous waste in part of their sites.

Hazardous waste generated in Somerset is also exported out of the county, in particular to facilities in Wiltshire and Swindon. The Wiltshire and Swindon area has continued capacity to receive hazardous waste. Quoting from the Waste Core Strategy adopted by Wiltshire County Council in 2009, “Purton Landfill has provided capacity for hazardous waste landfill on a regional level and it is anticipated that Parkgate Farm landfill will serve a similar role.”

Somerset County Council has not identified any need for provision of additional capacity for hazardous waste during the plan period, though this will be kept under review via annual monitoring work.

Question 16: Do you agree with the proposed approach to hazardous waste management in Somerset?
7. Have we missed anything?

Please take this opportunity to tell us if you feel strongly about a particular waste issue that we have not covered adequately in this consultation document.

Summary of the questions already posed in this document

Question 1
Do you support the proposed vision for sustainable waste management in Somerset?
   a) Yes, because…
   b) No, I would like to see it changed to include…

Question 2
Do you support the proposed objectives on place?
   a) Yes, because…
   b) No, I would like to see them changed to include…

Question 3
Do you support the proposed objectives on managing our waste as a resource?
   a) Yes, because…
   b) No, I would like to see them changed to include…

Question 4
Do you support the proposed objectives on community, health and environmental impacts?
   a) Yes, because…
   b) No, I would like to see them changed to include…

Question 5
Should Somerset plan for self sufficiency in waste treatment?

Option a) We should plan to provide sufficient treatment capacity to process the equivalent total quantity of waste generated in Somerset during the plan period, acknowledging that some waste will always cross boundaries; or
Option b) We should plan to provide sufficient treatment capacity to process the equivalent total quantity of waste generated in Somerset during the plan period, except for waste that requires management at specialised facilities; or

Option c) We should plan to provide sufficient treatment capacity to process the majority of waste generated in Somerset; however, decisions should be taken on a case by case basis, with efforts made to maximise the best use of the waste resource in environmental and economic terms.

Question 6
Do you think zones should be identified by Option A (proximity to Taunton, Bridgwater and Yeovil) or Option B (proximity to a wider network of towns)?

a) I support Option A because….
b) I support Option B because….
c) I don’t support either, because…..

Question 7
Do you have any comments on any of the six potential, proposed zones?

Question 8
Are there any areas in Somerset outside those identified that you think should be considered for strategic waste development? Please give your reasons.

Question 9
Do you support the proposed basic location principles?

a) Yes, because…
b) No, because …
c) Additional principles should be considered, which include...

Question 10
Do you support the proposed criteria for managing applications for recycling and residual waste treatment facilities?

a) Yes, because…
b) No, because …
c) Additional criteria should be considered, which include...

Question 11
Do you support the proposed criteria for managing landfill applications?

a) Yes, because…
b) No, because …
c) Additional criteria should be considered, which include…
Question 12
Do you have any comments on maximising the recovery of inert and C&D waste?

Question 13
Integrating waste infrastructure in new development.

a) Do you agree that urban extensions and other large areas of new development should include integrated waste management facilities?

b) Do you have any comments on the types of waste management infrastructure that should be provided within new housing and commercial areas?

c) Where development has been conceived as ‘eco development’ do you think there is an opportunity for exemplar standards of waste management infrastructure or do you think that the highest standards should be sought for all new development?

Question 14
Radioactive waste management in Somerset.

a) In 2007, over 50% of respondents thought that radioactive waste should not be imported from outside the County without a full and transparent justification. Do you support this view?

b) Do you agree that only radioactive waste generated at Hinkley Point should be treated or stored at Hinkley Point?

c) Do you think it reasonable to allow intermediate level waste and spent fuel to be treated and stored at Hinkley Point pending its long term disposal at a suitable radioactive waste geological repository?

Question 15
Do you support the proposed criteria for managing waste water applications?

a) Yes, because…

b) No, because …

c) Additional criteria should be considered, which include…

Question 16
Do you agree with the proposed approach to hazardous waste management in Somerset?
Accessibility

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Arabic

يتوفر هذا المستند أيضاً بطريقة بريل، بالطباعة الكبيرة، على شرائط أو على أقراس كما يمكن ترجمته إلى اللغة العربية.

Bengali

এই দলিলটি ব্রেইলে, মোটা হরফে, টেইপ-ক্যাসেট এবং ডিস্কে পাওয়া যায় এবং enj(Bengali) অথবা এটি অনুবাদ করে দেয়া যাবে।

Cantonese

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Turkish

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‘Working together for equalities’
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Copies of this document are available from:

Somerset County Council
Environment Directorate
County Hall
Taunton
Somerset
TA1 4DY
Tel: 0845 345 9188
Email: mineralsandwaste@somerset.gov.uk

To respond to the waste consultation online please visit: www.somersetconsults.org.uk

For further details of the Somerset Minerals and Waste Development Framework, and to view and download this and other documents, please visit our website.

www.somerset.gov.uk/mineralsandwaste