Waste Core Strategy

for Worcestershire

EMERGING PREFERRED OPTIONS CONSULTATION

The Council is preparing a "Waste Core Strategy: a plan for how to manage all the waste produced in Worcestershire up to 2027. In September 2008, the Council issued a "Refreshed Issues and Options Consultation" to invite a discussion on how we should proceed. This report is the follow up to that consultation. It sets out in detail the issues we need to address, how we intend to do so and the alternatives we have considered.

November 2009

Find out more online:
www.worcestershire.gov.uk/wcs

worcestershire
county council

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Please send your comments to:

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WR5 2NP

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Email: wcs@worcestershire.gov.uk

Please contact me if you need any further information or additional copies of this report or questionnaire.

Planning works best when the process is accessible, but for some it isn't. West Midlands Planning Aid provides a free and independent professional town planning advice and support service to communities and individuals.

The **West Midlands Planning Aid Service** contact details are:

Unit 319, The Custard Factory, Gibb Street, Birmingham, B9 4AA.

Tel: 0121 766 8044
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Web: www.planningaid.rtpi.org.uk

Worcestershire
Waste Core Strategy

Emerging Preferred Options Consultation

November 2009

Foreword

We all produce waste. It is a fact of life. People in Worcestershire produced about:

- 299,863t of municipal waste in 2008 (DEFRA);
- 792, 415t of commercial and industrial waste in 2007 (Environment Agency);
- An unknown amount, estimated to be 818,000t, of construction and demolition waste in 2006-07 (West Midlands Regional Planning Body).

The environmental costs of managing waste are difficult to calculate but are very wide ranging and must include traffic congestion, air pollution, the generation of greenhouse gases, soil, ground and water pollution and damage to the landscape and ecology of the County. Much of our Wastes are landfilled, 623,179t in 2007 (Environment Agency) resources which are effectively thrown away and ignored. The landfill tax alone on this tonnage was £19,379,662. The cost of transporting it and paying site owners to take it is estimated to be about £30million. A total cost to the Worcestershire economy of about £50million in 2007, for throwing resources away, of which at least ¾ could have been re-used at a profit. If we provide enough facilities we can save much of this, recycle it and turn it into a resource. We can reduce landfilling to the absolute minimum. This would not only reduce the harmful effects of what we currently do but save resources for the future.

The Waste Core Strategy will be one of the catalysts for this change.
The planning system will put in place the policy framework to enable it to happen.
However, only we, the people of Worcestershire, will make it happen.
We need to make sure, in the words of government policy, that there are "sufficient opportunities for new waste management facilities of the right type, in the right place and at the right time" to deal with it. We need to make sure that we can do so with the minimum of conflict.
Many of you have already been involved and we thank you for your valuable ideas so far. Please help us further by commenting on our ideas in this report.

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Figures and Tables

PART 1: What is this Report?

What does this Section include?

This section sets out what this report is and what the next steps will be in preparing the Waste Core Strategy.

This report is the Emerging Preferred Options Consultation for the Waste Core Strategy for Worcestershire. It builds on earlier consultation work, particularly last year's "Refreshed Issues and Options Report". We want it to promote further discussion about how many waste management facilities and what kind, we need and how and broadly where they should be developed to manage all our wastes. At this stage in the process we are defining our Vision and Objectives and how we should proceed. We set out below the alternatives we have considered to define how much waste we need to manage, what targets we should aim for and broadly how we could turn these into real proposals. Ideas for what draft policies we might need are included to suggest what these might mean in practice.
We must emphasise however that this report is intended to stimulate comment and discussion. It sets out the direction we wish to travel in and the scale of the issues we need to address. It does not represent our final views, only our current thinking. Please feel free to suggest alternative ideas or evidence that you think we should consider. Equally, feel free to question aspects of it, even if you do not feel able to suggest anything positive. All contributions of any kind will be welcome.

We will use your responses to work up final proposals, which will themselves be subject to further consultation at the "Pre-Submission Consultation stage" in January 2011.

Next Steps

We will consider all the comments we receive, clarify them with you if necessary, summarise them in another report **"Emerging Preferred Options - How you responded"** (a Summary Table of Consultation responses) and set out how we intend to address them in a report, **"Emerging Preferred Options - Our response to what you said"** (a summary of the consultation responses and how we intend to make use of them). Both reports will be produced before the end of March 2010.

We will then develop **Preferred Options** in detail over the next few months, undertaking focused consultations and involving groups, organisations and individuals over particular parts of it as necessary.

By August 2010, we intend to prepare a **final Draft of the Waste Core Strategy**, submit it to the Council's Cabinet and to full Council by the end of the year and undertake the formal **"Waste Core Strategy - Pre Submission Statutory Consultation"** in January and February 2011. This is the last opportunity for the public to comment or object to the Strategy. It will be for a specified period - the current legal requirement is six weeks and no late submissions can be accepted. Submitting the Strategy to the Secretary of State marks the commencement of the Examination (the Public Inquiry) into the Strategy. From that point on, we will be liaising with the Planning Inspectorate, the body responsible for assessing if the Strategy is "sound". The provisional timetable for this is:

Formal Submission of the Waste Core Strategy to the Secretary of State, May 2011;

Examination Hearing this is the public assessment of the Strategy by an independent Inspector. The Inspector sets the agenda, decides what will be discussed and who may participate. - September 2011. If he considers it "sound", the Inspector will set out what the Council must do if it is to adopt the Strategy (e.g. change specified wording to comply with government policy or to clarify meaning).

Adoption If the Inspector's report is that, subject to changes, the Strategy is "sound", the Council must make those changes and full Council can then adopt the Strategy. The public then has six weeks to mount a legal challenge. If none is made, the Waste Core Strategy is adopted and publicly advertised in local newspapers, Council offices and Libraries and becomes part of the Development Plan, the set of planning policies for Worcestershire.

It will then be:

Monitored in accordance with the specified criteria and reported on in the Minerals and Waste Annual Monitoring Report every December; and

Reviewed if we find that progress is not as we expected or that it no longer accords with national or regional policy.

PART 2: What will the final Waste Core Strategy be?

This section sets out what the Waste Core Strategy will be, its legal status, where it will apply, what it will include and how it relates to the Sustainable Community Strategy and Joint Municipal Waste Management Strategy.

The Waste Core Strategy will be the plan for Worcestershire's waste. It will set out how all the different kinds of waste produced by everyone who lives in, works in, or visits the county will be managed between now and 2027. Specifically, it will provide for all the Directive Waste produced in Worcestershire, viz:

- Municipal Solid Waste (MSW)
- Commercial and Industrial (C and I) Waste
- Hazardous Waste and
- Construction and Demolition (C and D) Waste.

It will not however address non-Directive Agricultural Waste, such as crop residues and animal dung, or mineral waste where this is dealt with within the quarry or gravel pit where it is produced.
It will not set out how you must deal with your waste, or where you must take it or who you must use. It will however make sure that there are sufficient opportunities for the waste management industry to address all the current and predicted future waste arisings in the county up to 2027. Most of the facilities to manage Worcestershire's waste will be in the county itself. Where, however, some wastes can only be treated at specialist facilities outside Worcestershire, the Strategy will make sure that there are sufficient facilities within the county to collect and transfer all those wastes to the specialists.

The Strategy will predict how much waste is likely to arise over the period up to 2027 and how much capacity will be needed to manage it and when. Because these estimates and the nature and source of the wastes produced and the technologies to manage them are all likely to change, the Strategy will be flexible. It will identify a range of different kinds of locations and enable different kinds of technologies to deal with it. Where the Strategy cannot be precise or specific, it will set out possible future directions and timescales to enable everyone to make the most of whatever opportunities or circumstances emerge. It will make sure however that whatever decisions are made the priorities are always the protection of human health and the environment.

What is its status?

Once adopted, the Waste Core Strategy will be a statutory "Local Development Document", part of the Development Plan for Worcestershire. That means it will be used by the County Council to determine planning applications for waste and taken account of by the City, Borough and District Councils in Worcestershire in their decision making. It will also inform and guide development by the private and public sector, particularly investment in Waste Management facilities and encourage and stimulate businesses involved in the recycling and re-use of resources generally.

Where is it for?

It will cover the whole of Worcestershire.

What will it include?

In summary, it will:

- Provide the Vision and Objectives for waste management in Worcestershire, up to 2027 and beyond;
- Create a strategy which ensures that there is sufficient, suitable land within Worcestershire to manage the County's waste;
- Provide a policy framework for managing waste related development;
- Set out a framework for its implementation, monitoring and review.

How does it relate to the Sustainable Community Strategy for Worcestershire and the Joint Municipal Waste Management Strategy?

The Sustainable Community Strategy for Worcestershire is the overarching plan for the County. It sets six strategic issues which all the public services, of which the County Council is only one part, will address:

- Communities that are safe and feel safe;
- A better environment for today and tomorrow;
- Economic success that is shared by all;
- Meeting the needs of children and young people;
- Improving Health; and
- Stronger Communities.

Each of these has priority outcomes. The following are particularly relevant to the Waste Core Strategy.

A better environment for today and tomorrow

- To enhance Worcestershire's countryside and urban greenspace and appropriate access to them while protecting the natural and historic environment;
- To maximise the diversion of waste away from landfill through prevention, re-use, recycling/composting and recovery
- To address issues of water quality, supply and consumption and land drainage in Worcestershire;
- To increase energy efficiency and increase the proportion of energy generated from renewable sources.

Tackling the Challenges of Climate Change

- To raise awareness of the issues of climate change;
- To reduce harmful climate change causing gas emissions across the county;
- To assist adaptation to the impacts of climate change on the county.

Community Engagement

- To empower local people to have a greater choice and influence over local decision making and a greater role in the planning, design and delivery of public service.

These aims will be realised through the Local Area Agreement 2008-11. The following targets link to the Waste Core Strategy,

- NI193 Municipal waste land filled, and to a lesser extent:
- NI186 Per Capita CO2 emissions in the Local Authority area,
- NI188 Adapting to climate change and
- NI195a Improved street and environmental cleanliness (levels of litter).

The Waste Core Strategy will take account of and contribute towards these so far as it is possible to do so.

The **Joint Municipal Waste Management Strategy (JMWMS)** is a specific strategy setting out how all six District, City and Borough Councils in Worcestershire and Herefordshire will collect municipal waste (e.g. your dustbin waste) and how Worcestershire County Council and Herefordshire Council will dispose of it between now and 2034. It does not deal with any other kinds of waste. The JMWS and Waste Core Strategies are being developed in parallel and will influence and take account of each other. They are however separate plans, produced under separate laws and regulations and cover different aspects of how and which wastes will be managed. The most significant overlap between them is that the JMWMS will set out what is required to manage municipal waste and the Waste Core Strategy will set out how and broadly where the sites for these will be permitted.

Background Work

This report is the follow up to the "Refreshed Issues and Options Consultation" in September 2008. You can find out more about all our earlier work and the evidence (background) papers we have produced including the Refreshed Issues and Options Consultation, what people said about it and a summary of the Consultation Responses and how we intend to address them on the Council's website ***(www.worcestershire.gov.uk/wcs)***

PART 3: Where are we now and what do we have to do?

A Spatial Portrait of Worcestershire

This section sets out a simple portrait of Worcestershire, shows where the existing Waste Arisings and Waste Management Facilities in the County are, summarises the policies we have to comply with and the broad issues we need to address.

The County of Worcestershire covers an area of 173,529 ha and is part of the West Midlands Region. It is adjacent to the West Midlands Conurbation and adjoins, Staffordshire, Herefordshire, Shropshire and Warwickshire. It also adjoins the South West Region and Gloucestershire. There are six District, City and Borough Councils in Worcestershire: Bromsgrove; Malvern Hills; Redditch; Worcester City; Wychavon and Wyre Forest.

Figure 1: Area of Coverage (see map following page 6)

The population of the County is 555,400,[1] 71% of whom live in urban areas, principally Worcester, Redditch, Kidderminster, Stourport-on-Severn, Bromsgrove, Malvern, Droitwich and Evesham. Worcester is the County town and, with about one-sixth of the County population, has a sub regional role as its main service and employment sector. Just under one-third of the population lives in rural areas of the County. The extreme west and north west of the County have been designated part of the Rural Regeneration Zone.

[1] ONS mid year estimate 2007

Economy

Worcestershire has relatively full employment, with 83.5% of the working population economically active in 2006/7[2]. Employment in the County is predominantly urban, with Retail, Distribution and Hotels, Public Administration, Health and Education Services employing almost half of the workforce. Textiles and Clothing, Chemicals and other Manufacturing are also locally important.
The towns in the north of the county have traditionally relied on manufacturing and have looked to Birmingham for markets. In Bromsgrove and Kidderminster, the collapse of the car and carpet industries respectively has weakened the local economies. Redditch, by comparison, has retained a more mixed, more robust employment base. Food-related industries are important in the southern half of the County. Worcester, Malvern and to a lesser degree Droitwich have large Distribution and Professional and Educational sectors. Worcester is the County's research centre.

Some towns, notably Bewdley, Pershore, Upton and Tenbury, provide a traditional market town role, serving an extensive rural hinterland. Together with Stourport and Evesham, these towns are likely to be a focus for work to assist rural regeneration.

Where waste is produced (Waste arisings) broadly reflects the distribution of population and the location of industry.

Figure 2: Waste Arisings Worcestershire 2007 (see map following page 6)

Current Waste Management in Worcestershire

In general, waste sites tend to be clustered in or near to towns in the north of the County with few existing waste sites in Malvern Hills District and Worcester City. The most marked exceptions to this are civic amenity sites, which are found in or near to all towns in the County. At present, the following waste facilities are operational in the County:

- 12 household waste sites,
- 22 Waste Transfer Stations and 2 Material Reclamation Facilities,
- 15 Metal Recycling sites (10 of which manage End of Life Vehicles),
- 7 Composting Sites,
- 7 Physical Treatment Sites,
- 3 Thermal Treatment Sites, and
- 13 Landfill sites or infilling operations.

Figure 3 gives an indication of the current distribution of sites. It is however only illustrative in nature. Exact locations and more details regarding site size, the materials handled and the issues currently faced are set out in Worcestershire Waste Core Strategy Background Document: Waste Sites in Worcestershire.

Figure 3: Existing Waste Management Facilities in Worcestershire (see map following page 6)

[2] Office for National Statistics/NOMIS, 2007. Annual Population Survey
http://www.statistics.gov.uk/STATBASE/Product.asp?vlnk=10855

Waste Core Strategy

AREA OF COVERAGE

- Principal Urban Areas / Urban Settlements
- Other Settlements

Strategic Highway Network

- Motorways
- Motorway Junction
- Other Principal Roads
- Lorry Routes (see note)
- B Roads used as Lorry Routes
- Railways
- Rail Stations
- Major Rivers
- Canals
- Worcestershire County Boundary
- District Boundary
- Green Belt

Note: Lorry Routes - This information was taked from Worcestershire Advisory Lorry Route Map dated 2006

May 2009

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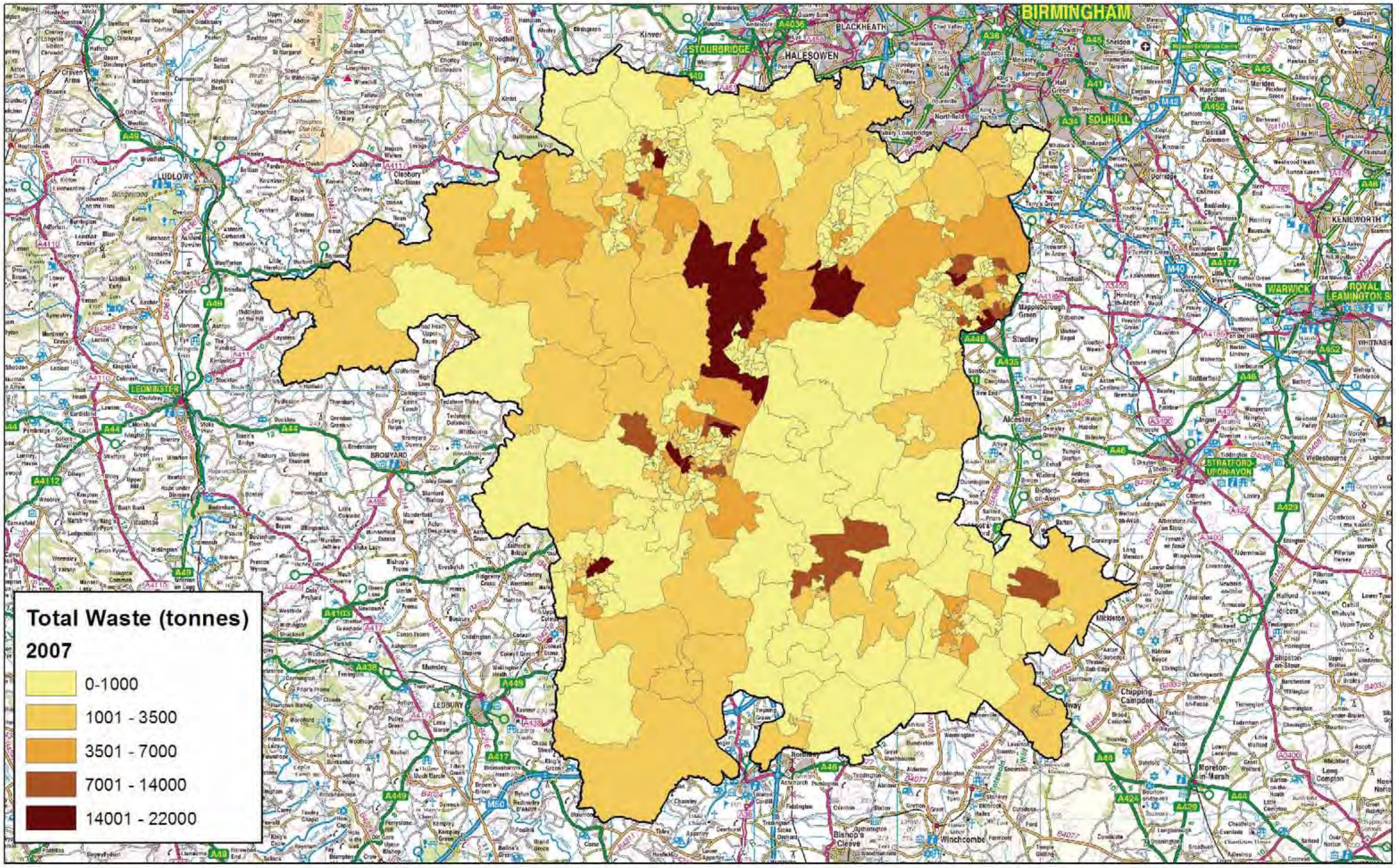

worcestershire county council

Total C and I Waste Arisings by Lower Super Output Area

Based on ADAS Study into Commercial and Industrial Waste Arisings April 2009

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Waste Core Strategy for Worcestershire:

Map 4 - Existing Waste Sites

- County Boundary
- Principal Urban Areas
- Other Settlements
- Major Rivers
- Canals

Existing Waste Sites August 2009

- A02 - Other landfill taking special waste (1)
- A04 - Household, commercial and industrial waste landfill (4)
- A05 - Landfill taking non-biodegradable waste (5)
- A10 - In house storage facility (1)
- A11 - Household, commercial and industrial waste transfer station (16)
- A13 - Household waste amenity site (12)
- A14 - Transfer station taking non-biodegradable waste (3)
- WTD - Waste Transport Depot (2)
- A15 - Material recycling facility (4)
- A16 - Physical treatment facility (6)
- A18 - Incinerator (2)
- A19 - Metal recycling site (vehicle dismantler) (2)
- A19a - End of Life Vehicles facility (9)
- A20 - Metal recycling site (MRS) (Mixed) (6)
- A22 - Composting facility (4)

- P OPP - Outstanding Planning Permission (11)
- P PC - Pending Consideration (4)

Total Number of Sites - 93

August 2009

NB: Due to the scale of the map,symbols are only indicative of the site location

The number shown in brackets on the key: e.g. (3) indicates the number of sites in that category in Worcestershire.

WTD (Waste Transport Depot) is not an Environment Agency 'A Code' but is a term derived by Worcestershire County Council Planning Policy team to describe two specific sites, which did not neatly fit under any of the 'A Code' Listings, which were primarily used as storage depots.

OPP (Outstanding Planning Permission) refers to sites with planning permission for Waste Management Facilities but are not yet implemented.

PC (Pending Consideration) refers to sites, where planning applications had been submitted to the County Council and are pending consideration.

5000 0 5000 10000

Metres

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Transport

River barriers significantly influence travel within Worcestershire, the main strategic transport routes in the county, notably the M5 and the Birmingham to Bristol Railway, are markedly north-south and river crossing points are often congested. Motorway links to the M42 and M50 do however mean that long distance movements into and across the county are easily possible[3]. This said, road congestion is a major constraint on growth.

So far as alternative means of transport are concerned, the River Avon is navigable throughout the county and the Severn as far north as Bewdley. The canal network is extensive and connects to systems to the north, south and east of the county. The county is well served by railways but there is very little spare capacity and the development of new stations or railheads will not be easy. As a general rule the capacity for increased freight movement by inland waterway or rail from and or within Worcestershire is not likely to be significant. At present all the county's waste is transported by road.

Agriculture

Agriculture dominates the use of land in the county. Only 1% of the West Midlands are Grade 1 Agricultural Land Quality and virtually all of this is in Worcestershire and Herefordshire[4]. The greatest part of the county is in productive agricultural use, most distinctively horticulture, particularly orchards and market gardening. Forestry remains the principal land use of the Wyre Forest.

Landscape, Geology and Hydrology

Worcestershire's landscape is one of the most diverse in Britain. It spans the boundary between the ancient landscapes of the north and west of Britain and the planned landscapes associated with much of Central England; with a combination of geology, topography, soils, tree cover, settlement patterns and land use that have produced 22 significantly different rural landscape types. In addition the Malvern Hills AONB is almost wholly and the Cotswolds AONB is partly within the county. The European Geoparks Association has designated the west of the county as part of the Abberley and Malvern Hills Geopark, one of only three geoparks in the UK.

The contrast of hard rocks to the north and west and softer rocks in the central and southern areas gives Worcestershire the appearance of a shallow basin surrounded by a ridge of higher ground, forming the catchment of the River Severn and its tributaries the Teme, Avon and Stour. Land drainage and flooding issues are important influences on development in several of the county's towns.

Biodiversity

Worcestershire encompasses the southern limit of many northern plant and animal species and the northern limit of species found in the south and so is exceptionally rich biologically. There are 111 SSSIs in the county, of which Worcestershire's unimproved neutral grasslands are of national importance with over one quarter of the UK resource. There are also two SACs (European designated Special Areas of Conservation) in the county and 5 other European protected sites within 15km of the county boundary.

[3] Worcestershire's Local Transport Plan 2006-2011 http://worcestershire.whub.org.uk/ltp-2006/wcc-transport-ltp-final-2006-2011.pdf

[4] Agricultural Land Classification (ALC) Statistics, DEFRA, www.defra.gov.uk

Heritage

There are over 15,000 archaeological sites, 235 Scheduled Ancient Monuments and 6,800 Listed Buildings in the Worcestershire.

Flood Risk

Approximately 10% of the land area of Worcestershire is at risk of flooding. This area includes at least 9,146 properties. Flooding affects every town in the county and will significantly affect where development can take place.
It is equally possible that water shortages could frustrate development, including waste management, over the life of the Strategy. Customer security of water supplied by Severn Trent Water is ranked 20th out of 23 (where 23rd is the poorest performance) in England and Wales[5].

Sustainability

The county produces significant volumes of greenhouse gas (around 5.3mt of CO2)[6]. At 9.7 tonnes/per head, emissions are higher than the West Midlands regional figure (9.1 t/head). It has been estimated that on average in Worcestershire each of us is living on a resource base equivalent to 2.93 planets[7]. You can find out more about the Spatial Portrait in Worcestershire Waste Core Strategy Background Document: Spatial Portrait ***(www.worcestershire.gov.uk/wcs)*** and "Economic Summary" for Worcestershire

Policy Issues

What we can do locally is limited and prescribed by policies prepared internationally, e.g. European Union Directives, nationally, e.g. Planning Policy Statements and the National Waste Strategy, regionally, through the Regional Spatial Strategy and locally, by the County, City, Borough and District Councils in Worcestershire and their partnership organisations.
The diagram below simplifies the relationship between these and shows some of the most important policy drivers.

Figure 4: Relevant Plans and Policies

Details of how all of these relate to the Waste Core Strategy are summarised in Appendix 1. We have to take these and all of the following into account.

[5] Ofwat "Security of Supply 2006-07 report. http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/Attachments. ByTitle/SecuritySupply_06-07.pdf/$FILE/SecuritySupply_06-07.pdf

[6] Environment Agency 2007, http://www.environment-agency.gov.uk/.

[7] Worldwide Fund for Nature sustainability survey of 60 cities. (Worcester is ranked 24th)

Contextual Issues

The Waste Core Strategy also has to take account of a range of other less specific issues which set the context for what it needs to address and how. A series of Background Documents have been produced to develop an evidence base around these issues. These are living documents which set out our present thinking and will be regularly updated as we prepare the Strategy (a full list is included in appendix 2). We also think that the following factors will be particularly significant:

- Future changes within the West Midlands and the economy. We have based our assumptions on "Drivers for Change" (AWM Forum for the Future),
- The likelihood that new methods of waste management and new technologies will emerge during the life of the Strategy,
- That Climate Change will become an ever more pressing issue. We intend to develop the Waste Core Strategy in the expectation that we will need to review it in the light of further government advice about how to address Climate Change during the life of the Strategy.

We can also start from the premise that we are already living beyond our environmental means. We already know that using the planet's resources within the limits of its eco systems is vital to the survival, health and prosperity of future generations. The most crucial threat to these is from dangerous climate change. The cost of tackling this threat now will be far less than the damaging costs of climate change later if we fail to take prompt action.

Reducing our use of natural resources and recycling materials and recovering energy from those we do use is a vital part of moving towards a more sustainable existence. Disposal of biodegradable waste to landfill results in emissions of methane, a powerful greenhouse gas which adds to global warming (methane is 23 times as damaging a greenhouse gas as carbon dioxide and currently makes up about 3% of UK greenhouse gas emissions). On the other hand, recycling waste and recovery of energy from it can preserve virgin materials and reduce the use of fossil fuels (so reducing greenhouse gas emissions). By further reducing landfill and increasing the amount of waste that is recycled, composted or has energy recovered, there is considerable scope for reducing greenhouse gas emissions from the waste we produce.

You can find out more about the broad issues in the "Worcestershire Climate Change Strategy" ***(www.worcestershire.gov.uk)*** and our current thinking about what we particularly need to consider in the Waste Core Strategy in our background paper "Climate Change" ***(www.worcestershire.gov.uk)***.
In addition, if waste is not managed safely, it can become a serious threat to public health and damage the environment as well as being a local nuisance.

Local Waste Management Issues

Our approach in the Preferred Issues and Options Consultation was to emphasise that it would be unrealistic and misleading to prescribe what technologies or types or size of waste management facilities we need. We still believe this is the case. In developing the Emerging Preferred Options we intend therefore to emphasise the need for flexibility. We must anticipate that at least in the short term the economy will be unsteady, waste production and the technologies available to manage it may be unpredictable and that Climate Change may generate unexpected pressures. On the other hand, we can also assume that waste management will be increasingly attractive and landfilling increasingly unattractive to industry and that in general dealing with waste will be of more concern to policy makers and more of a business opportunity to entrepreneurs. We intend therefore to develop the Waste Core Strategy with an eye to flexibility, to assuming that reviewing its progress will be important and that we must not frustrate innovation or market opportunity in what we do.

All of the above and our consultations have identified that we must address the need to:

- manage waste as a sustainable resource;
- protect human health and enhancing the environment generally and Worcestershire's special characteristics in particular;
- support waste minimisation and the integration of waste management with other development proposals;
- ensure that we have enough waste management capacity;
- consider how to identify areas suitable for waste management purposes;
- consider how to assess our progress in achieving the strategy.

PART 4: Where do we want to be? What are our Vision and objectives?

This section sets out our proposed Vision and Objectives for the Strategy.

Developing the Vision

We need to translate the issues, needs and constraints generated by all of the above into a meaningful vision to direct the Emerging Preferred Options.
Whilst the vision can be ambitious and inspiring, it needs to be realistic. It must be informed by all the influences referred to above and the consultations we have undertaken to date and it must attempt to capture the thoughts of everyone involved to be acceptable to and useful to the people of Worcestershire.
We need a picture of what waste management will mean in Worcestershire in 2026,to understand what we need to do to achieve it and give us:

- objectives to aim for;
- policies to achieve; and
- ways of assessing our progress in meeting it.

The Council has used the consultations and workshops undertaken as part of the "Planning Issues and Options", "Moving towards the Development of Preferred Options" and "Refreshed Issues and Options" consultations to develop a Vision for the Waste Core Strategy. You can find out more about people's comments on the developing vision in these documents on our website ***(www.worcestershire.gov.uk/wcs)***

We welcome any comments you would like to make on it. If the need for a new direction is identified, the debate about what the Vision for the Waste Core Strategy will be reopened. You can find out more about our thinking behind the Vision Statement in the background document, "Towards a Vision Statement" ***(www.worcestershire.gov.uk)***.

REVISED DRAFT VISION STATEMENT

The Vision driving the Waste Core Strategy is that:

"By 2027 waste production in Worcestershire will be minimised and what is produced will be regarded as a source of useful material, to be treated so far as possible in Worcestershire itself, in accordance with the principles of sustainable development."

To be useful, however, that Vision cannot be restricted to a single statement. It must be a philosophy that guides us, it must encompass all of the following, that:

1. Waste minimisation will be our priority. The issue is no longer one of waste disposal but of resource management, that the management of waste as a way of saving scarce resources is always something to be encouraged.
2. We need a change of attitude, not only a recognition that waste management is essential to the economy, but also as something which is just another business activity and not something automatically to be regarded as a bad neighbour.
3. There will be significantly more waste management capacity and facilities of different kinds and sizes than there are now.

4. There will be very little material that cannot be recycled. What cannot be recycled will mostly be used to generate useful benefits, such as for energy recovery or as fuel. Only as a last resort will it be landfilled.
5. Waste management must be resource efficient, and not create pollution, damage natural or cultural assets or unacceptably affect the health or amenities of local people.
6. Waste management is a dynamic, constantly changing activity, part of a network of symbiotic activities both within Worcestershire and the West Midlands. The network of waste facilities in the county and the individual components within it, must be capable of constant adjustment to address changes in the nature of business activity and technology within the wider economy up to 2027 and beyond. Our key word must be flexibility.
7. For business, waste will mean opportunity and for Councils it will mean encouraging new waste management facilities.
8. Momentum is gathering to make the West Midlands a Zero waste region. We should be prepared for this to be our long term goal.

All these mean that we must all take responsibility for what waste we produce and what we do with it and that ultimately we must look to doing away with "wasting" it altogether. They also mean that we should look to making a high provision for waste management; if we do anything less, we will make it difficult for the industry to get the planning permission it needs and we will not achieve our Vision.

We will know we are realizing it when all the targets prescribed in National, Regional and Joint Municipal Waste Management Strategies have been met and our monitoring processes show that there aren`t any other significant matters which need attention. By that time, we will need a new Vision and to revise the Waste Core Strategy accordingly. For the present, we intend to apply the Strategy until 2027, to link with the RSS, with provisions to address issues beyond them.

How can we realise this Vision? What should be our Objectives?

The **Vision** will give us a sense of direction but it needs to be worked up into more detailed **Objectives**, to direct what policies we need so it can be realised. The Council consulted on draft objectives in December 2004 and September 2005 and on proposed revisions to these in October 2008. The comments made in response and changes in government guidance mean that we think that it is necessary to revise these again.

Context

The government is emphatic; the Core Strategy should not repeat or reformulate national or regional policy. You may find it helpful to know that the most relevant of these are:

- the key principles of planning for sustainable development in PPS1;
- the key planning objectives in PPS10; and

the principles underlying development in the West Midlands Regional Spatial Strategy.

We propose that the Waste Core Strategy will comply with all of these and government and regional policy generally unless there are very special reasons, which would justify the contrary.

Key elements for us are:

- **To identify broad areas and locational criteria for Waste Management development and**
- **To ensure that we do so in a way that protects human health and the environment.**

The Council intends therefore to base the Strategy on the following objectives: These are numbered for convenience of referencing, not in order of significance, they are all equally important,

WO1 To base our decisions on the principles of sustainable development and the need to reduce and mitigate the causes of climate change to guide decisions,

WO2 To do everything possible to minimise waste production,

WO3 To address the "Capacity Gap" between how much waste management capacity we have and what we need.

WO4 To make implementing the waste hierarchy the basis for Waste Management in Worcestershire,

WO5 To make communities in Worcestershire take responsibility for their own waste,

WO6 To reduce the transportation of waste by road where possible,

WO7 To ensure that the waste implications of all new development in Worcestershire are taken into account,

WO8 To safeguard existing waste management facilities from incompatible development,

WO9 To involve all those affected as openly and effectively as possible,

WO10 To monitor the effects of the Waste Core Strategy and revise it accordingly as circumstances change.

It is the Council's intention to keep the Objectives under long-term review. Their value will be assessed as part of the **Monitoring Programme** for the Waste Core Strategy. One of the triggers for the review of the Strategy will be if the Objectives need updating or if the Vision behind them itself needs to be revised. In order to meet these Objectives, we need to determine:

- How much Waste do we need to manage over the life of the Strategy?
- How much additional capacity we need?
- How much land we will need to manage it?
- Where should it go?
- Are our proposals sustainable?
- What do we need to prepare for after 2027?
- How do we manage development? and
- How do we monitor success?

These are developed in turn below and the alternatives we considered are referred to. We intend to carry out targeted consultations with the parties or specialist interests most involved or affected by particular sections during 2010. We will consult everyone on our final proposals before we submit the Strategy to the Secretary of State for Examination.

PART 5: How much Waste do we need to manage over the life of the Strategy?

How much waste we need to manage is fundamental to the Strategy but is not easily defined. Waste management data is not easy to obtain, is rarely up to date and is recognised as flawed at all levels of government. We have attempted to define it as precisely as we can but national policy recognises that there is a risk of "spurious precision" (PPS10). All the figures in this section should therefore be treated with caution. All are likely to be revised before the Strategy is adopted but we hope that the changes will be modest. All of the following should not therefore be interpreted as final or inflexible. They are nonetheless the best we have at the time of writing.

Summary of Waste Arisings and Growth Estimates

Municipal Solid (MSW) Waste

MSW includes all waste under the control of local authorities or agents acting on their behalf.

What alternatives have we considered?

We looked at 2 sources of background data for MSW and 11 alternative projections for how the tonnage is likely to change (the 5 options for growth scenarios in the Joint Municipal Waste Management Strategy, the 4 scenarios in Waste Strategy 2007, the RSS Future Capacity Requirements report and Phase 2 Revision Draft Preferred Options) to estimate future projections of arisings to assess how much MSW we need to address.

We think that our arisings of MSW will be:

Table 1: MSW Projections (Worcestershire and Herefordshire)

2010/11	405,139tpa
2015/16	421,817tpa
2020/21	438,496tpa
2034	485,197tpa

We think that we should develop Preferred Options using these figures. You can find a summary of how we calculated this and a link to detailed background papers in Appendix 5.

Commercial and Industrial (C and I) Waste

The following classifications are used here for simplicity's sake:

- Commercial waste - waste arising from wholesalers, catering establishments, retail premises and offices;
- Industrial waste - waste arising from factories and industrial plants.

Data on C and I waste is collected by the Environment Agency in a variety of ways; DEFRA and the West Midlands Regional Technical Advisory Body have also attempted to analyse it.

What alternatives have we considered?

We looked at four assessments of waste arisings and two estimates of waste managed, to decide what was the best source of background data and two projections of possible waste arisings. We used these to develop three possible scenarios for future waste arisings. We think that our arisings of C and I waste will be:

Table 2: C and I Projections (Worcestershire)

2005/6	785,822tpa
2010/11	842,770tpa
2015/16	907,517tpa
2020/1	981,131tpa
2025/26	1,064,825tpa

We think that we should develop Preferred Options using these figures. You can find a summary of how we calculated this and a link to detailed background papers in Appendix 6.

Hazardous Waste

Hazardous waste includes many substances generally recognised as potentially dangerous such as pesticides, asbestos and strong acids. However, a number of wastes that result from everyday activities (for example, mobile phone batteries and used engine oils, redundant fridges and freezers, scrap cars (End of Life Vehicles) and some waste electrical and electronic equipment) (WEEE)) have also been designated hazardous waste.

What alternatives have we considered?

Following the introduction of the Special Waste Regulations 1996, all movements of special waste are tracked until they reach a waste management facility. As a consequence, relatively detailed information about the production, movement and treatment of this waste stream is available from the Environment Agency. There is no evidence to suggest that alternative data on arisings exists or should be used.

We did however look at 2 alternative projections for future hazardous waste arisings.

Hazardous Waste: Arisings and Predictions

We intend to use the Waste Data Interrogator to identify Hazardous Waste Managed in Worcestershire. The figure for 2007 is 49,761.26 tonnes p.a. every year up to 2027.
We think that we should develop Preferred Options using this figure. We will consider other data sources if and when they become available. You can find out more about how we calculated this and a link to detailed background papers in Appendix 7, "Calculation of Hazardous Waste Arisings and Projections".

Construction, Demolition and Excavation (C and D) Waste

Construction, demolition and excavation (C & D) waste arises from the construction, repair, maintenance and demolition of buildings and structures. It mostly includes brick, concrete, hardcore, subsoil and topsoil, but it can also include quantities of timber, metal, plastics and (occasionally) special waste materials.

Construction and demolition waste was traditionally disposed of locally at exempt sites as landscaping, to restore land to beneficial use using waste as engineering or fill material or at landfill sites, as daily cover to contain other waste. However, changes in the waste management licensing regulations and the introduction of the Landfill and Aggregates Taxes had a significant impact on this waste stream, an increasing proportion of which is now being treated in screening and crushing plants often at the site of origin prior to re-use as an aggregate or fill, again, often at the site of origin.

While these outcomes are very much in line with Government policy to reduce unnecessary regulation and reclaim as much material as possible, the changes in waste management have led to considerable difficulty in quantifying the amount of construction and demolition waste generated. There are no reliable assessments.

What alternatives have we considered?

We looked at four different ways of assessing how a figure for Worcestershire might be calculated.
We think that our Arisings of C and D Waste will be:

Table 3: C and D Projections (Worcestershire)

2007	818,015tpa
2007-11	510,555tpa
2011-21	419,520tpa

We think that we should develop Preferred Options using these figures. You can find out more about how we calculated this and a link to more detailed background papers in Appendix 8.

We have also looked at the following waste streams in detail:

Agricultural Waste

By which we mean Directive Waste, i.e. non-natural waste from farms, such as plastics, scrap metal, tyres, glass, building waste, paper and cardboard. We estimate that arisings were 3,487t in 2003 and that these will increase at the same rate as Industrial Waste and will be managed as part of the wider C and I waste stream (you can find out more in our background paper "Agricultural Waste", ***(www.worcestershire.gov.uk/wcs)***. We think that we should develop Preferred Options using these figures.

Clinical Waste

By which we mean waste arising from the health work undertaken by the Primary Care Trust, Mental Health Partnership and Acute Hospitals Trust. We estimate that arisings are about 1,000tpa, including low level radioactive waste (from x-rays, dentists, veterinary surgeons, including contaminated paper, wipes, etc) which we estimate to be less than 10m3 or 10kg pa. We estimate that this will increase at the same rate as the population (you can find out more in our background paper, "Clinical Waste", ***(www.worcestershire.gov.uk/wcs)***. We think that we should develop Preferred Options using these figures.

Waste Imports and Exports

- The economy takes little account of geographical or local government boundaries, goods and services move freely into, out of and within the County according to supply and demand. Waste materials are the same. The supply of and demand for materials, the need for specialist facilities for some waste streams and commercial pressures and opportunities mean that significant volumes of waste flow in and out of the County. Data on these movements is limited however. The only reliable source appears to be the Environment Agency Waste Data Interrogator but it is very limited and at present the source of most imports and origin of most exports is not clear. It is possible however to state with some certainty that:

- Waste imports into Worcestershire are at least 50.939tpa. (2007 from Environment Agency, Waste Data Interrogator). The greater part of this is recorded as being from the West Midlands Conurbation. We know how ever that a comparable amount of MSW is imported from Herefordshire as part of the JMWMS. The Waste Data Interrogator does not record this. It does however state that at least 368,661.19t was recorded as "Non Codeable". This figure includes movements between Districts within, as well as movements out of, Worcestershire. It is very likely therefore that the amount of waste imported into the County is higher than that recorded in the Waste Data Interrogator.
- Waste exports from Worcestershire were at least 125,317t; however the Waste Data Interrogator states that 195,195t were recorded as Non Codeable. This figure includes movements between Districts within, as well as movements out of, Worcestershire. Again, it is very likely therefore that the amount of waste exported from the County is higher than that recorded in the Waste Data Interrogator.

We intend to monitor these figures and the availability of data generally to see if a clearer assessment is possible. You can find out more about Imports and Exports of Waste in our background paper, "Waste Arisings" ***(www.worcestershire.gov.uk)***. For the present however we think that we should recognise that:

- waste is imported into Worcestershire;
- waste is exported out of Worcestershire; and that
- the volumes of both are significant.

We intend to develop Preferred Options which enable both imports and exports of waste into and out of Worcestershire to move freely within the context of a Strategy which seeks to provide sufficient facilities to manage a volume equivalent to the total waste arisings within the County. One of the ways we intend to make this possible is to ensure that there is sufficient waste transfer capacity.

Q.1 Do you agree that these Arisings and Projections are a sound estimate of how much Waste we need to manage over the life of the Strategy and that we should develop Preferred Options on this basis?

	MSW	C & I	C & D	Hazardous	Agricultural	Clinical
Yes						
No						

If no, please could you explain why and suggest alternatives.

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PART 6: How much additional capacity do we need to manage all this waste over the life of the Waste Core Strategy?

This section sets out how much additional capacity we need to plan for.

How much additional waste management capacity we need is fundamental to the development of the Strategy. It will, however, be subject to constant revision as facilities open and close, expand and contract and to changing assumptions about how, where and when the population and economy of the County will change. All of these are also subject to wider changes in the world outside the County. Monitoring and amending the targets we set is therefore important.
In practice, the capacity that we need to plan for is derived from a combination of:

- Targets set out in national and regional policy and any local alternatives we might propose,
- Estimates of the nature and scale of waste arisings in the County and therefore what capacity will be needed locally to manage this waste,
- Estimates of the scale of existing waste management capacity in Worcestershire,
- The "Capacity Gap" between estimates of the total capacity needed to meet the adopted targets and existing capacity, as these exist at any particular time.

These are derived from a variety of sources, which are usually at least a year out of date (often longer, because of problems of data collection and analysis) and are themselves subject to constant change. Nonetheless, at any point during the preparation of the Strategy it is necessary to adopt "Working targets" to aim for, even though it is equally necessary to realise that they will change.

You can find out more about the issues and alternatives we considered in the background paper, "Capacity Gap", on our website ***(www.worcestershire.gov.uk)***.
We intend to develop Preferred Options for how much additional capacity we need during the life of the Strategy. We think we can do so on the basis of the following:

MSW

What alternatives have we considered?
We have considered 2 approaches:

- Providing for what is required in the RSS
- Providing for what is required in the JMWMS

In practice however, these are complementary. The RSS does not prescribe what has to be provided; only that targets should be met. We think that there are no good reasons why we cannot satisfy both. The Council has adopted the JMWMS and it is imperative that we help realise it.

We think therefore that we need the following New Capacity to manage MSW over the life of the Strategy:

The JMWMS is based on maximising recycling and treatment capacity. The Strategy states that this will be achieved through:

- Kerbside collection of selected materials (largely in place);
- Sorting/Recycling these materials at the MRF at Norton, capacity 108,500tpa (permitted, to commence soon);

- Composting Green Waste collections (from households and Household Recycling Sites) (Herefordshire's collections will be processed at Moreton on Lugg (permitted, to commence soon) Worcestershire's at Hill and Moor, operational capacity 25,000tpa);
- Sorting/Recycling at Household Recycling Sites in each town (some in place).
- The thermal treatment of up to 250,000tpa of residual waste; and
- landfilling further residual waste, up to but not exceeding the Councils in LATS allocation.

To consider these in detail:

Treatment Facilities
The JMWMS identifies the need to manage up to 250,000t of residual MSW each year by 2034 through some form of thermal treatment. The options under consideration are:
Option A - a single Energy from Waste (EfW) facility;
Option B - a single EfW with combined heat and power (CHP);
Option C - two Mechanical Biological Treatment (MBT) facilities, located on two separate sites, one with on site combustion;
Option D - two MBT facilities, each with off site combustion;
Option E - a single autoclave;
Option F - two autoclaves, located on separate sites;
Option G - EfW located out of county. (JMWMS Consultation February 2009: Annex A)
Until the decision is made, we intend to develop options which could address any of the above.

Additional Recycling/Household sites
The JMWMS Consultation assumes improved recycling of household waste, that a site is specifically needed in Tenbury. It is likely however that new or improved Household Recycling Sites are likely to be needed in several other towns in the County before 2034
Again, we do not think that alternative options are possible.

Composting
The composting site at Hill and Moor is linked to the landfill permission. If the landfill is completed or the existing composting area is infilled as part of the landfilling operation before 2027, as seems likely, new capacity of least 25,000tpa, will be needed in Worcestershire to replace it. We do not think that we have any realistic alternative but to provide for this capacity. We will however develop options as to how we should do so.

Landfill
On the basis of the calculations in the JMWMS, we think that provision also needs to be made to landfill a cumulative total of 2,802,187t of MSW between 2007 and 2027 of untreatable MSW and residual waste from the thermal treatment facility or facilities. We think that we should develop Preferred Options to make this possible. We will however consider alternatives to make it possible to reduce the volumes actually landfilled. You can find out more about the alternatives considered on the Council's website "Waste" pages, under the heading "Joint Municipal Waste Management Strategy" ***(www.worcestershire.gov.uk/...)*** and in our background paper, "Landfill", ***www.worcestershire.gov.uk/wcs***.

Dependent on how the figures are calculated, we think that the County is likely to run out of landfill space at about 2027, plus or minus two years. We also need to ensure that sufficient landfill space exists to dispose of residual MSW after the plan period. We intend to monitor actual MSW landfilling and report it in the Annual Monitoring Report to inform us more precisely when we need to identify further sites. This is likely to be one of the findings which will trigger the need to review the Strategy itself.

C and I Waste

What alternatives have we considered?

The targets we have to meet are set out in Waste Strategy 2007 and in the RSS Phase 2 Revision.
We believe however that in order to achieve our Vision we need to aim higher, that we should choose targets which are more ambitious, that are highly sustainable but still achievable. The WMRTAB commissioned a "Waste Scenarios Study" (WMRA/Enviros) (Final Report July 2005) which assessed seven possible scenarios on which policy could be based. **We have considered these and we believe that Scenario 5: to divert at least 75% of C and I arising away from landfill and for a maximum of 25% to landfill is the most likely to achieve our Vision and it is our Preferred Option for developing targets for C and I Waste for the Waste Core Strategy** (you can find out more about these 7 options and a link to the Waste Scenarios Study on the WMRA website in Appendix 11.

Our current capacity to manage C and I waste is 107,820tpa.
On the basis of these figures, we think that we need the following additional minimum capacity to treat C and I waste:

Table 4: Projected minimum treatment capacity for C and I Waste (Worcestershire)

2010/11	542,257tpa
2015/16	572,818tpa
2020/21	628,028tpa
2025/26	690,799tpa
2035/36	843,505tpa

and the following maximum landfill capacity:

Table 5: Projected minimum landfill for C and I waste (Worcestershire)

2010/11	210,692tpa
2015/16	226,879tpa
2020/21	245,283tpa
2025/26	266,206tpa
2035/36	317,104tpa

giving a cumulated total need for landfill capacity of 5,127,488t of C and I over the period 2007-2027.
You can find out more about how we calculated this and a link to more detailed background papers in Appendix 10.

One further alternative we considered is whether or not to base the Strategy on the BPEO. In 2003, the Council adopted an "Assessment of the Best Practicable Environmental Options for Municipal Solid Waste, Commercial and Industrial Waste and Construction and Demolition Waste Arisings for Worcestershire and Herefordshire (June 2003 ERM) ***(www.worcestershire.gov.uk/wcs)*** ("the BPEO"). This remains Council policy but is no longer part of national policy. The Council has used it to develop the targets in JMWMS.

We consulted on whether we should use the BPEO in the Refreshed Issues and Options consultation and received a mixed response. We do not intend therefore to give it much weight when developing Preferred Options. It is worth noting however that the target we are proposing now would be consistent with the BPEO policy of recycling at least 73% of C and I waste. The Scenario we are proposing to adopt for the Waste Core Strategy, to divert at least 75% of C and I waste away from landfill, would be broadly consistent with this.

Special Issues

Not all C and I waste management capacity is interchangeable. We believe that some waste streams need to be specifically identified and special provision made for them. Waste Strategy 2007 identifies the following as **key waste materials**: paper, food, glass, aluminium, plastic and textiles.
Data on these is not easily obtainable (you can find out more in our background paper, "Waste Arisings") ***(www.worcestershire.gov.uk/wcs)***.
Given the priority these materials are given in national policy, we anticipate however that more data will become available over the life of the Strategy.
We intend therefore, if possible, to monitor arisings of these materials during the life of the Strategy to see if they make revision of it necessary.

At this stage, however, we do not believe that these data limitations are particularly important. There is no evidence that most of these materials cannot be addressed through most of the conventional means of waste collection, transfer and management and we intend to address them within our approach to C and I waste generally. We do believe however that two of the key waste materials streams are of such a scale and have particular issues that they need closer analysis, viz:

- Metal arisings (which will include aluminium); and
- Biodegradable arisings (which will include food and some paper, wood and textile arisings).

For simplicity, however, we have dealt with them as single sub sets of Industrial and Commercial wastes as below.

Metal Waste

There is no typical metal recycling site (MRS) but they generally involve sorting and bulking operations or processing of metals for recycling. These operations tend to be industrial in nature and can be undertaken outside or in factory or industrial units. However, the size of the facilities and the processes used can vary considerably.

Feedback gained during discussions with MRS operators suggests that on the whole there is very limited need for expansion of metal treatment capacity in the County over the life of the Strategy. Most had surplus capacity already to process predicted arisings, several had sub let parts of their sites to other businesses because changes in the nature of the business (mostly tighter pollution control and the decline in sales of spare parts) meant that they no longer needed to use all of the site.

Based on the information presented in the background paper, "Metal Recycling" ***(www.worcestershire.gov.uk/wcs)***, we consider that there is unlikely to be a shortfall in waste metal treatment capacity in the County and therefore that we should develop Preferred Options on the basis that it is not necessary for special provision for metal recycling site to be identified in the Waste Core Strategy.

However, this assumption would not preclude granting planning permission during the life of the Strategy for new sites or extensions to existing ones where applicants considered that they could exploit a business opportunity in a way that would be environmentally acceptable. We believe that this will also satisfactorily address aluminium arisings (one of the government's key Waste materials) in Worcestershire.

Biodegradable Waste

Biodegradable waste is defined as:

> "any waste that is capable of undergoing anaerobic or aerobic decomposition such as food and garden waste, and paper and paperboard."

The EU Landfill Directive sets targets for the diversion of biodegradable municipal waste from landfill, cutting the volume of biodegradable municipal waste sent to landfill to 35% of the 1995 levels by 2020. In addition, government policy aims to encourage businesses and local authorities to recover resources from waste.

Waste Arisings

Municipal Waste: In 2006-07, 287,833 tonnes of household waste was collected in Worcestershire; of this, 9.78% of municipal waste collected was composted. The amount of green waste collected is likely to increase with widening collection services in 2009. The collected waste is composted in outdoor windrows, most of which is managed at Hill and Moor in Worcestershire but very small volumes are treated at sites in Gloucestershire and Herefordshire on grounds of proximity. Until now, Herefordshire's biodegradable MSW was almost entirely composted in Worcestershire. After 2010, however, it will be composted at a site in Herefordshire. One option would be to include provision for Herefordshire's composting in Worcestershire - as part of our (joint) Integrated Municipal Waste Management Contract. Now that Herefordshire has made provisions to treat this waste, we do not intend to include any assessment for Herefordshire's biodegradable waste in our projections for how much composting facility will be needed in Worcestershire.

Sewage Sludge: An estimated 13,450 tonnes of sewage sludge is produced in Worcestershire each year and about 95% of this is managed by Anaerobic Digestion. New facilities are only likely to be required if new development or changes in treatment processes result in a considerable increase in sewage sludge production which cannot be addressed at existing facilities. There is no evidence that this is likely. We do not think that we need to develop options to specifically address this.

Agriculture: It is estimated that 95% of agricultural waste arisings are compostable. In the West Midlands, this amounts to 5,647,752 tonnes. This is, however, non-Directive Waste which is almost entirely managed and recycled where it is produced under Agricultural Permitted Development Rights. We only need to address this waste in the Waste Core Strategy if proposals would make it Directive Waste (e.g. if it were to be moved away from the point of origin, used for non agricultural or forestry sources or processed in ways which need planning permission). There is no evidence that this is likely to occur on any scale. It is possible however that proposals might emerge to compost or generate energy from forestry materials. We think that we need to develop Preferred Options to make this possible. The Strategy will also need to be flexible enough to enable what are currently embryonic Regional Wood Fuel proposals to be realised.

Other Commercial and Industrial Waste: A 2008 study estimated that about 8% of Commercial and Industrial (C&I) Waste in the West Midlands is composed of biodegradable materials.

What alternatives have we considered?

On the basis of these figures and using the three Scenarios for future arisings discussed in Part 5 above, we can identify the following alternative estimates of future arisings of biodegradable C and I waste.

Table 6: Estimates of future arisings of biodegradable C&I waste in Worcestershire (tonnes per annum)

Estimate	2005/6	2010/11	2015/16	2020/21	2025/26
Scenario 1: Total C&I Biodegradable	761,000 *60,800*	774,000 *61,920*	895,000 *71,600*	1,144,000 *91,520*	1,144,000 *91,520*
Scenario 2: Total C&I Biodegradable	785,222 *62,866*	842,770 *67,421*	907,517 *72,601*	981,131 *78,490*	1,064,825 *85,186*
Scenario 3: Total C&I Biodegradable	568,199 *45,456*	591,339 *47,307*	634,190 *50,735*	682,910 *54,633*	738,300 *59,064*

You can find out more about biodegradable waste in the background paper, "Resource Recovery from Biodegradable Waste: composting and Anaerobic Digestion" ***(www.worcestershire.gov.uk/wcs)***

There are already two operational composting sites in Worcestershire. There are also a number of current consents which have not commenced at the time of writing. We can compare these and the projections above to identify the Treatment Capacity Gap for Biodegradable Material.

In summary, this is that we need:

- Additional capacity to manage between 58,900 and 91,500 tonnes pa of biodegradable C and I Waste;
- Continued composting capacity for at least 25,000tpa of biodegradable MSW,
- Policies to enable an unspecified volume of non-Directive biodegradable waste to be managed if there are commercial pressures to do so.

We intend to develop Preferred Options to address these.

Hazardous Waste

As discussed in Part 5 above, we believe that the scale of Hazardous waste arisings over the life of the Strategy will be about 49,000tpa throughout the life of the Strategy.
Our current capacity to manage this material is limited to five Waste Transfer Stations, which collectively have a notional capacity of 143,400tpa, significantly in excess of the County's arisings. It is in the nature of hazardous wastes that they are of such a specialist nature that they can only be managed at sites dedicated for those materials. Because of economies of scale there are often very few of these in the entire country.

What alternatives have we considered?

We looked at 2 possibilities:

- Managing all of the County's hazardous waste ourselves.
- Maintaining the status quo.

In practice we think that the second is the only realistic option.
It is not realistic to expect each area to manage its own hazardous wastes and we believe that we should develop Preferred Options for the Waste Core Strategy by ensuring that we maintain sufficient transfer capacity and develop policies which would enable permission to be granted for facilities to treat or dispose of the equivalent volumes should any such applications be made. We do not believe however that there is any evidence that we should make express provision for any greater capacity.

Construction and Demolition (C and D) Waste

As described in Part 5 above, we believe that arisings for C and D waste can best be by relating it to our share of the Region's future housing development.
The best figures available to date are that C and D Waste arisings in Worcestershire are likely to be:

Table 7: C and D waste arisings

2007	818,015t
2007-11	510,555tpa
2011-2021	410,520tpa

West Midlands Waste Facilities: Phase 2: Future Capacity requirements (WMRA/Shropshire CC 2004)

There is no evidence that significant volumes of C and D waste is being landfilled in Worcestershire, but data on how and where this material is managed and recycled is poor.

What alternatives have we considered?

- Meeting specific targets
- Enabling a free market solution

The idea of meeting a specific target is attractive.
Waste Strategy 2007 sets a target

- to recycle 50% of the C and D Waste landfilled in 2004 by 2012.

DEFRA are however unable to produce figures for the volume landfilled in 2004. We do not see how we could monitor activity to meet this target. We are not aware of any other targets. In practice, therefore, we do not believe that we have any realistic choice. We believe that we cannot identify a precise "Capacity Gap" for the management of C and D Waste and that we should therefore develop Preferred Options which would enable planning permission to be granted should applications be made up to the levels predicted above. In practice, we believe that most C and D waste will continue to be recycled in an ad hoc way as sites are redeveloped. We intend to see if a policy should be developed to encourage this. We have granted planning permission for a proposal which would recycle about 100,000t of C and D waste pa (although it is not yet operational). We think that applications for planning permissions on such a scale will be uncommon.

Transfer Station Capacity

Waste Transfer Stations exist because it is often necessary to bring together waste produced from a lot of sources to one place for bulking prior to its transportation to another for treatment, disposal or for further transportation. Worcestershire currently has a waste transfer station capacity of about 358,000tpa (2007). Their locations are shown in Fig 3 (above). There is insufficient data to identify where the materials collected are transported to (you can find out more in our background paper, "Waste Transfer Stations" ***(www.worcestershire.gov.uk).*** The RSS Draft Preferred Options, policy W1, requires an allowance to be made for Waste Transfer Stations, without clarifying what this should be.

What alternatives have we considered?

We looked at:

- Developing a specific target for Worcestershire.
- Developing a target that would be consistent with regional practice

We have no evidence on which to develop a specific target for the County. In the absence of anything else we cannot see any alternative to being consistent with Regional practice. At the moment this can only mean maintaining the same ratio of waste transfer capacity to waste managed that exists in the region.

We believe that it would be useful to develop Preferred Options that at least match the distribution of Waste Transfer Stations across the region, which is about 1t of transfer capacity to 3t of waste managed. Given current totals of 1,165,000t of waste being managed in the County and existing (actual) waste treatment capacity of 358,000tpa (Environment Agency Waste Data Interrogator 2007), there would appear to be sufficient capacity at present. Given our prediction of up to 2mt waste pa of total waste arisings in the County in 2025/26, there would be a "cumulative" shortfall of about 300,000t by then. Planning permission has however already been given for a Materials Reclamation Facility at Norton with a capacity of 108,000tpa of MSW and in practice the shortfall is likely to be lower as other recent planning permissions are implemented and reveal their actual capacity. This is a subject where evidence and policy direction are almost completely lacking. We particularly welcome comments on our proposed approach.

Landfill

Landfill (the term includes landraising) is a form of waste management which addresses all waste streams.

What options have we considered?

In practice we think that the only realistic options are to be consistent with our approach above:

- to develop Options for MSW which realise the JMWMS; and
- to follow our Preferred Option for C and D waste (to divert at least 75% of arisings away from landfill).

These are consistent with national and regional policy. We do not think that other alternatives are practicable in Worcestershire at this time. We expect however to monitor progress and anticipate that revisions of the Strategy will seek to reduce landfilling further.

We recognise the need to reduce it but at present we think that there is no alternative to continuing to landfill some waste. We need therefore to ensure that we will have sufficient capacity over the life of the Strategy.
Our current permitted landfill capacity (2007) is 9,012,647m³ (Environment Agency).

The RSS estimates that we need to provide capacity for a maximum of 9,045,052m3 (9,481,953t) of waste to be landfilled in Worcestershire up to 2026, based on a conversion from tonnage to m3 using the following figures:
@1t/m³ for MSW, C and I and Hazardous waste including daily cover and
@1.5t/m³ for C and D waste.
(Source: "A Study into Future Landfill Capacity in the West Midlands" WMRA/Scott Wilson May 2007 para 6.3)

Based on these estimates there would therefore be a deficit of 32,405m³ by 2027 to meet the RSS targets in RSS (Preferred Options) policy W2.
We are developing alternative estimates that suggest we have sufficient capacity to meet the landfill requirement to + or - 2 years of 2027 (you can find out more in our background paper, "Landfill", www.worcestershire.gov.uk). We intend to clarify when this capacity will be exhausted by undertaking focused consultations in 2010 and to propose Options as to how and when we need to consider what capacity we need and what alternatives may be possible. There are a lot of variables to consider and any calculations must be based on a lot of assumptions over at least 15 years. At present, we anticipate needing to ensure that some landfill capacity will be available in the County after 2027. We do not think that it would be useful to anticipate what this might be or where it might be appropriate to develop it at this stage. We intend therefore to monitor the decline in landfill capacity over the life of the Strategy and to use it as one of the variables which would determine when we should review the Strategy. We welcome your comments on this approach.

In summary therefore we welcome your comments on all of this part of the report. The following sets out what we think we need to do. Do you agree?

Q.2 Do you think that we should develop Preferred Options on the basis that we should provide for the following additional waste management capacity to be available in the County?

		Yes	No
Thermal treatment facility/facilities	To treat up to 250,000tpa of MSW by 2034		
New/improved Household Waste Sites	At Tenbury and to make provision for at least 5 existing sites to be extended or relocated		
Landfill Capacity	for the following (maximum) cumulative tonnages between 2007 and 2026:		
	MSW - 2,802,187t		
	C and I - 5,127,488t		
	Hazardous (stabilised) - 37,867t		
	C and D - 1,310,702t		
	Cumulative total: 9,481,953t (9,045,052m3) (to meet RSS Policy W2 targets).		
Composting and/or AD facilities	with a capacity of at least 25,000tpa biodegradable MSW if the site at Hill and Moor closes;		
	additional facilities to manage between: 58,000 and 91,000tpa of biodegradable C and I waste by 2027; and		
	for an unspecified volume of non-Directive biodegradable waste		
Diversion from Landfill	Treatment capacity to enable the diversion of the following volumes of C and I waste from landfill 524,257tpa by 2010/11 572,818tpa by 2015/16 628,028tpa by 2020/21 690,799tpa by 2025/26 843,505tpa by 2035/36		
	And Treatment capacity to enable the diversion of as much of Worcestershire's C and D waste away from landfill as possible and		
Waste Transfer Capacity	300,000t additional to meet at a ratio of 1t waste transfer capacity to 3t waste management capacity.		

If no, please could you explain why and suggest alternatives.

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PART 7: Towards a Strategy?

This section sets out how we intend to develop the Strategy.

We need to turn our Vision and Objectives from abstract concepts to concrete proposals which apply spatially to Worcestershire itself.

What alternatives have we considered?

Our earlier consultations have shown general support for the following:

- to concentrate waste development in urban locations, with justified minimal development in rural areas;
- to focus on centralising facilities but with dispersed facilities if justified;
- to establish primarily larger facilities; and
- that waste development would be appropriate in the Green Belt when in accordance with national policy.

These are all in conformity with national and regional policy and we intend to continue with them. You can find out more about how we selected these and the consultation response to them in part 2 and on our website ***www.worcestershire.gov.uk/wcs***

How much land will we need?

Every waste management facility is different and operators will all have different preferences as to how much land they need for their particular proposal. It is however possible to generalise that, on average, modern waste management facilities need about 1HA to process about 50,000t of waste per year. On the basis of this ratio, our initial estimate is that we anticipate needing to make about the following areas of land necessary during the life of the Strategy:

- 14HA to manage C and I waste,
- 7.5HA to manage MSW,
- 2HA to manage biodegradable waste,
- 6HA for waste transfer stations,
- additional land to manage C and D waste (area cannot be specified at present) and
- additional land to manage non-Directive biodegradable waste (area cannot be specified at present).

Total needed, about 30HA (minimum) over the period 2007-2027.

It must be stressed however that:

- many of the existing waste facilities in Worcestershire process waste on much smaller sites than this ratio of 1HA/50,000tpa and that,
- permission has already been granted, but not yet commenced, for proposals which would manage about 700,000t of waste p.a., i.e. equivalent to about 14HA of land (at this ratio).

It is possible that not all of these will commence. It is very likely however that we may well only have to identify something like half of the land area suggested above. We may therefore be looking to find about 1HA, or less, per year of land for new waste management facilities over the life of the Strategy.

We intend to develop a range of Options for how much land we might need, based roughly on a ratio of 1HA/50,000t of waste pa and will undertake focused consultations on these during 2010 and general consultations during 2011.

You can find out more about the land areas recommended for modern facilities and the actual sizes of site occupied by facilities in Worcestershire in our background documents, "Types of Waste Management Facilities" and "Waste Sites in Worcestershire" ***(www.worcestershire.gov.uk/wcs)***.

Where should new Waste Management Capacity be provided?

Emerging RSS policy (for Worcestershire) is that most new development should be focused on "Settlements of Significant Development" which are:

- Worcester, the sub regional focus, and
- Redditch.

Worcester, Redditch and Kidderminster are also identified as Local Regeneration areas and strategic town centres. They are also identified as well placed for regional or sub-regional scale waste facilities.

A Central Technology Belt has been developed along the line of Longbridge, Bromsgrove, Droitwich, Worcester, Malvern. Further development is likely along this Belt.

Future development in the rest of the County is expected to maintain the key role of market towns and foster a wider rural regeneration, with an area broadly west of Droitwich and north of Malvern identified as a rural regeneration zone where the priorities include economic diversification.

The RSS is quite clear, that there is a hierarchy of where development should be focused. There is no evidence to justify not following this.

A possible Hierarchy of Broad Areas for Allocating Capacity

We think therefore that to accord with the RSS that our Preferred Option to identify the Broad Areas for new identification should be a hierarchy of:

- Worcester and its expansion areas,
- Redditch and its expansion areas in Worcestershire,
- Kidderminster, Bromsgrove and Droitwich and the Central Technology Belt from and including Longbridge and Malvern,
- the major market towns: Evesham, Stourport and Bewdley,
- Tenbury, in its role as market town and part of the Rural Regeneration Zone,
- Pershore and Upton
- limited rural development where the proximity to waste streams justifies it particularly in the Rural Regeneration Zone. Some wastes arise from areas of low population and scattered communities or require facilities which need to be at a distance from "sensitive receptors". The RSS specifically requires that some capacity should be provided for these.

Policies in the RSS require local authorities to supply an appropriate portfolio of sites, to maximise the re-use of land and to ensure that new development is readily accessible. The District Councils in Worcestershire will define existing and proposed development (including employment) sites in their Core Strategies. We will need to take account of all of these. We think that the Options we have chosen so far mean that new waste management facilities will need to be located in or near the employment land allocations proposed for these towns as well as within their existing built up areas.

The RSS seeks to reduce traffic movement and these areas represent both a source of arisings and potential locations for managing them which would reduce such movement. One of the issues we also need to take account of in developing detailed Options is the fact that some large industrial estates exist in the County which are quite distinct from specific towns. Alternatives exist therefore as to where new waste management could go within the Broad Areas Hierarchy. We will explore these at the next stage.
A further source of Options is:

How much New Capacity should be provided at the levels of the Broad Hierarchy and where?

National and regional policy and the proposed Strategy Objective WL02 are that waste management facilities should be located as close to arisings as possible.

What alternatives have we considered?

The JMWMS identifies where (broadly)

- new Household Recycling Sites should be developed and
- sets general prescriptions that facilities, including the proposal to treat residual waste, should be located closed to arisings as possible.

We intend to develop Options to explore where might be most suitable; a natural starting point will be to identify the centre of MSW arisings.

C and I Waste

We do not have estimates of where current and future waste arisings are, or are likely to be, in any detail. Two proxies are possible, however. To develop Options on the basis of:

- future arisings;
- present arisings;
- a combination of present and future arisings.

Future Arisings
It is RSS policy that new employment land should be distributed in the following proportions:

28.1% Worcester City
23.9% Wychavon
17.7% Redditch
11.5% Wyre Forest
11.5% Malvern Hills
7.3% Bromsgrove.

There was some support for using this as a method of distributing the need for new waste management capacity in the responses to the "Refreshed Issues and Options" consultation. We think that these percentages are a useful indicator of where, at a District level, most new development should take place and, at a broad level, these will be where most new arisings of C and I waste are likely to be generated. The details of where this new employment land will be will be developed in more detail in District Council Local Development Documents. So far as possible, we will take account of these. As a general rule, the RSS recommends developing waste management facilities close to arisings and we intend to pursue this. Basing Options on future employment sites would however not take account of present arisings - which is where most arisings are likely to continue to be generated.

Present Arisings

The DEFRA Report, "Study into Commercial and Industrial Waste Arisings" (April 2009) (ADAS), shows that different industrial sectors produce different kinds of waste and that relative waste production can be mapped at a fairly low level. However the difference between the volumes of waste identified using the ADAS methodology and those produced by the Environment Agency are so marked that we do not feel comfortable at using them at this stage. We do think however that it is the best indicator of the distribution of existing waste production we have at present. It is possible to predict changes in the economy, to some extent and hence the shift in waste arisings as some sectors increase or decrease. We intend to explore this using the ADAS methodology to see how present arisings might change. Basing Options solely on this would however not take account of future changes in employment land and the likely shift in waste production over time.

Neither using the RSS% for where new development is likely in Worcestershire or the ADAS distribution of current arisings is satisfactory in itself but both have value. We think that combining the two would however enable us to identify Broad Areas for where existing and future C and I arisings are likely to be. We intend to develop Preferred Options using this in detail over 2010. We would welcome your comments on this approach and any alternatives you can suggest. We welcome suggestions for alternative methods we might consider.

Where should new Waste Management Facilities be permitted?

National and regional policy set out clear requirements. Locations for new waste management facilities should be based (inter alia) on:

- ensuring a range of sites of different size and geographical distribution
- good accessibility to the source of waste arisings and/or end users and
- good transport connections including, where possible, rail or water.

In the first instance, such sites should be either:

- Sites with current use rights for waste management purposes;
- Active mineral working sites or landfills where the proposal is both operationally related to the permitted use and for a temporary period commensurate with the permitted use of the site;
- Previous or existing industrial land;
- Contaminated or derelict land;
- Land within or adjoining a sewage treatment works; or
- Redundant agricultural or forestry buildings and their curtilage.

The assumption is also that they will not be on open ground, including the greenbelt unless further criteria are complied with except in very special circumstances are identified. We do not think that there is any evidence to justify not basing the Strategy on this. In practice, we anticipate that sufficient land currently exists in the County within these categories to enable us to meet the capacity gap. We intend in particular to prepare Options which would explore developing most new facilities on existing and future industrial estates. The single exception to this is likely to be proposals for windrow composting. In order to enable a suitable cordon sanitaire to be set up around such sites, we intend to consider concentrating these on land away from possible sensitive receptors. Such land could be landfill sites, sewage works or redundant agricultural land.

How do we intend to develop the Strategy?

We think that we can match the availability of this kind of land in the Broad Areas identified above with how much new capacity should be provided, to identify a long list of possible Locations for new facilities. We have commissioned research to investigate the suitability of existing industrial estates in Worcestershire for future waste management facilities, the availability of land and attitude of estate owners and managers which shows that sufficient estates exist and will be available.

We are concerned, however, that there is a risk of being over-prescriptive. The evidence in Worcestershire is that surveys of the availability of specific sites can become rapidly out of date and that sites and premises can become unexpectedly available and can be granted planning permission for waste facilities relatively easily. We think therefore that our Strategy should be to identify areas where new facilities need to be permitted and general locations, broadly industrial estates, where land is available. We can then develop criteria to assess what kind of facilities would be suitable on which site and the suitability of specific proposals. This is one of the most important issues before us at this stage. Do you think that there are other alternatives that we should consider? Are there other ways we could realise the options we have chosen so far?
We intend to produce a series of plans showing different ways of distributing how much capacity we need and relating these to our research on the availability of land. The end product will be a set of alternative Options on a map base during 2010 and our analysis of which we prefer. We will undertake focused consultations on these to develop our final proposals. We intend to include everyone who responds to this document in those focused consultations. We will also involve the statutory and public bodies we think most involved. This will include the relevant District and Parish Councils. We will consult all of the above and the public on our final proposals in 2011.

Q.3 Do you agree that the proposals set out in Part 7 would be a sound way of developing Preferred Options?

Do you agree with our proposals for the how much land we are likely to need for where new Waste Management Facilities should be permitted?

Yes ☐

No ☐

If no, please could you explain why and suggest alternatives.

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Do you agree with our proposed Hierarchy of Broad Areas for Allocating Capacity?

Yes ☐

No ☐

If no, please could you explain why and suggest alternatives.

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We need policies to enable all of these to be realised. Our thinking is set out in Part 8 below.

PART 8: Proposed Policies

This section sets out what kind of policies we think we will need to implement the Strategy.

It is government policy that the Strategies should not repeat national or regional policy. All of the following proposals must therefore be seen in context of those policies and of how they will be applied, namely:

- New development will be assessed against all relevant national and regional policies, even though these are not expressly included;
- New development will also be assessed against all relevant policies in the final Core Strategy and will be expected to conform with them unless material planning considerations dictate otherwise;
- The Waste Core Strategy should be read as a whole, individual policies need to be seen in context, not interpreted in isolation;
- The policies are not listed in priority order; and
- Where a policy contains a list of criteria, factors or proposals, these are not in any order or priority unless the policy specifically states that they are.

Ensuring Sustainable Development

There are contradictory pressures on us. On the one hand, we should not repeat national or regional policy. On the other, we think that it could be useful to include a policy which sets out that Waste Management Development should be sustainable and the context within which decisions will be made.

We need policies which drive change forward and which include both mitigation measures to stabilise climate change and adaptation measures to take account of unavoidable consequences. Our Strategy will be informed by the Strategic Flood Risk Assessments for the County which will contribute significantly to identifying areas and transport routes at risk from future flooding.

We also anticipate that the Government's Climate Change Programme and energy policies will further emphasise resource and energy efficiency and reductions in carbon emissions in new development. DEFRA's Performance Indicators for local authorities already include:

"Climate Change Mitigation" indicators for the percentage reduction in carbon emissions per head of population as well as for the authority's own estate and operations; and

"Progress towards a Climate-Resilient Local Area" indicators which measure an authority's capacity to adapt to both the positive and adverse impacts of climate change.

These and others that are issued will affect what we should do and how we should monitor it. Information on what might be the most sustainable use for particular waste streams or the merits of different technologies is currently very limited.

We think that the Strategy should focus on identifying locations where facilities can be developed rather than prescribing the technologies to be used. At present, therefore, we think that the best ways we can minimise and monitor the impacts of waste management in Worcestershire on climate change will be to:

- encourage waste minimisation
- focus on carbon reduction;
- enable the efficient use and reuse of resources;
- encourage sustainable energy use;
- reduce traffic movement and
- require these to be incorporated in the designs of facilities.

We have to accept however that these may not be practicable for some small scale proposals. Some issues are also only partly under our control. Waste water treatment, for example, can require high energy inputs. Reducing water use would reduce that energy use but that is more appropriately dealt with in District Core Strategies. We can however encourage SUDS (Sustainable Urban Drainage Systems) and "alternative" methods of water treatment (like WET or reedbed systems) or anaerobic digestion at sewage treatment works and to use the gases generated for energy production.

We can however contribute to reducing greenhouse gas emissions by policies that:

- require landfill gas collection and man agement systems and, where practicable, to generate electricity;
- identify suitable locations for biodegradable waste streams to be diverted from landfill, to reduce methane emissions;
- encourage recyclables to be sorted and processed close to where they are produced;
- protect ,maintain and seek to regenerate carbon sinks, notably woodland;
- encourage energy generation from waste and developments that enable fossil fuels to be replaced by carbon derived fuels and
- safeguard existing facilities.

Draft policy SR3C in the Phase 2 Draft Preferred Options of the WMRSS includes a policy that all new medium and large scale development should:

> "incorporate renewable or low energy equipment to meet at least 10% of the development's residual energy demand".

What alternatives have we considered?

- Implementing this policy in advance of the RSS revision;
- Requiring a higher percentage to be met;
- Not requiring any percentage whatsoever.

We think that the proposed RSS policy or something similar is likely to be approved by the Secretary of State.
We have no evidence to justify requiring a higher percentage. We also have some reservations that by doing so we might frustrate waste management proposals which would otherwise be desirable.
Not requiring any percentage would not, however, comply with national and local climate change policies.

For the purpose of developing ideas we propose therefore to include a requirement that facilities over 1000 sq m gain 10% (or more, if local targets are higher) of energy supply from alternative or renewable sources. Your comments are particularly invited on this.

We think therefore that we also need to develop a policy which sets out how we could ensure sustainable development in a wider sense than just reducing energy use.

Draft Policy Direction WCS1: Ensuring Sustainable Development

We think that the Waste Core Strategy should require that:
Proposals for waste management related development must contribute to the delivery of sustainable development in Worcestershire by ensuring that the social economic and environmental impacts of waste management, including cross boundary and cumulative impacts, are kept to an acceptable minimum.
We think that any such policy could include how proposals for waste management related development will be assessed using criteria and that these could include:

The extent to which the proposal:

- contributes to, or mitigates, or will be able to adapt to, the anticipated adverse effects of Climate Change,
- implements the principles of the Waste Hierarchy to foster higher end uses and maximises the use of waste materials as a resource,
- is based on the best available information and
- is in accordance with national, regional and local planning policies.

Such criteria could include requirements to show that:

- energy management, environmental performance and carbon reduction have been determining design features;
- the location will minimise the "waste miles" involved;
- developments with a gross floor space of over a certain size (e.g. 1000 sq m) gain at least 10% (or more, if local targets are higher) of energy supply annually, from renewable energy supplies (unless it can be demonstrated that this would not be feasible or viable, or the development is part of an integrated process for reducing greenhouse gas emissions or for carbon offsetting measures) and
- where appropriate, the landscaping or restoration proposals have a role in combating the adverse effects of climate change and
- where practicable, construction minimises the use of primary materials and maximises the use of recycled/reused materials.

The adequacy and appropriateness of the Strategy will be assessed annually and the whole Strategy reviewed if our monitoring indicates that it is necessary, or it is no longer conforming to national or regional policy.

Do you think that this would be a useful basis on which to develop a policy? Please comment in Question 7 below.

Achieving a Spatial Hierarchy

Objective WO6 is to:
"make communities in Worcestershire take responsibility for their own waste".

We think that we should expressly state our commitment to this and explain the Spatial Implications for Worcestershire. Our aim is to address the waste management implications of the Regional Spatial Strategy for the West Midlands and to develop facilities as close as possible to the source of current and future arisings. We think that we need a policy to do so and that such a policy should be based on the Broad Hierarchy proposed above. We think that it could include a requirement that:

Draft Policy Direction WCS2: Spatial Hierarchy

Over the period up to 2027, sufficient sites will be identified or safeguarded to meet the RSS sub-regional apportionment to divert MSW and C and I waste away from landfill for Worcestershire and that the policy should set out where the Waste Core Strategy will provide sites in accordance with the following order of priority:

- the Settlements of Significant Development of Worcester and Redditch;
- the growth and regeneration of Kidderminster, Bromsgrove and Droitwich;
- the High Technology corridor between and including Longbridge and Malvern;
- the market towns of Evesham, Bewdley and Stourport;
- Tenbury, Pershore and Upton;
- the rural regeneration zone; and
- other rural areas.

Do you agree? Please comment on Question 7 below.

What kind of facilities would be suitable, where?

It is government policy that Core Strategies should not normally prescribe the waste management techniques or technologies to be used, but should rather identify what type or types of facility would be appropriately located on a site. What alternatives have we considered?

We think that three broad approaches are possible, to categorise sites by:

- Size or
- By broad kind
- By specific type.

Options based on Size

We think that one Option could be to distinguish between strategic large and local small scale waste management facilities. We will need to define what these would be.

Strategic large facilities could be large and/or more specialist facilities that will operate in a wider strategic manner by virtue of spatial scale, high tonnage of waste managed, specialist nature of the waste managed and/or a wider catchment area served. They could include:

- Strategic materials recovery facilities (MRFs), necessary to implement the JMWMS;
- Strategic composting facilities, necessary to implement the JMWMS;
- Energy from waste facilities (EfW);
- Mechanical biological treatment facilities (MBT);
- Landfill/landraise sites (other than very small operations undertaken under Permitted Development Rights).

We expect that strategic facilities will serve either large areas within, or the whole, County or be of regional significance. Such sites would have characteristics that prevent them from being accommodated on small and/or sensitive sites and locations - the choice of location could therefore be guided by the physical characteristics of the Plan area and the principles set out in Annex E of PPS10. We need a basis to define such sites. Options could be:

- By tonnage;
- By site size;

and within these there are alternatives:

- Tonnage could be: that 50,000t or more p.a. would be strategic/large sites; less than 50,000t would be local/small sites.

We would welcome your comments on any such categories.
Because of economies of scale or the nature of the waste arisings, there will be circumstances where these specialist or strategic sites cannot adequately meet smaller-scale local needs. In such cases, it could be more appropriate for some waste management operations to be undertaken at a smaller, more local scale. These facilities are just as essential, helping to provide local solutions for collecting, sorting, bulking, transferring and treating wastes as well as complementing the County, Borough and Regional level solutions provided by strategic waste management facilities.

Local waste management facilities will be expected to handle waste sourced from a limited geographical catchment, such as the equivalent of a District area, parts of a District or a local urban area. These could include:

- Local recycling facilities, e.g. businesses collecting, storing, sorting and bulking particular waste materials prior to their transfer to waste processing companies;
- Local scale materials recovery facilities, collecting, storing, sorting and bulking a wide range of waste materials prior to transfer;
- Waste transfer stations where waste is deposited, stored and then transferred in larger loads to a waste recovery or disposal facility;
- Scrap yards and inert waste and aggregates recycling facilities serving the needs of a particular area;
- Local scale composting, e.g. on farms or small waste management sites, receiving inputs from limited sources or local building and business contracts;
- Household Recycling Centres; and
- Local Recyclable Collection points (e.g. "Bring" collection points at Supermarkets).
- In all cases, however, such sites would need to be below the set threshold.

Alternatives by broad type

We asked a question in the Refreshed Issues and Options consultation (Question 22) if the following concepts could be used to distinguish the locations in which waste management facilities should be developed.
Facilities where the primary waste management activity would be

a) Outdoors;
b) Windrow composting or
c) Landfill, or
d) Indoors, or
e) Indoors, but where emissions would be dispersed significantly beyond the site.

The public's responses were not enthusiastic. In particular, a key concern was that different technologies could have hugely varying impacts due to their possible scale, design or height and that further detail would be necessary to define how different technologies would be grouped into broad types. In response we do not think that this will be easily agreed and that this may not be easy to achieve.

By Specific Type

This would be relatively easy to achieve and could be linked to the size of facilities. It is not easy however to see how future technologies could be addressed by this method.

Q.4 Do you think that we should develop Preferred Options on the basis of defining what waste management facilities would be acceptable where on the basis of:

- ☐ a) their size (and, if so, how strategic/large or local/small facilities should be defined);
- ☐ b) by broad kind (and, if so, how);
- ☐ c) or by specific type (and, if so how future technologies could be categorised); or
- ☐ d) any other method? (if so, please specify).

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Future Waste Site Allocations

Exactly where the forecast growth in the County will be is not yet known because the work allocating strategic housing and employment sites is yet to be completed in the District Council Core Strategies. We need therefore to build flexibility into the Waste Core Strategy to accommodate the projected growth. This issue will be reviewed in subsequent updates of the Councils' evidence base and any review of the Waste Core Strategy as specific growth areas are identified, planned and implemented through the Councils' wider LDF work.

We think that we need a policy to set out what kind of development will broadly be located where, over the life of the plan.

We also need to encourage developers to adopt the principles of sustainable transport when planning proposals for new development at the strategic or local scale. In line with the principles of national policy statements, we also need to recognise the need to protect AONBs in the county.

There are seven Natura 2000 sites of European conservation importance in and within 15km of the County that are protected by European legislation in the form of the Habitats Directive (92/43/EEC). Due to the strategic level of protection for the Natura 2000 sites and protected species we do not think that it is necessary to refer to these at this point.

The Habitats Directive introduced the requirement to undertake a Habitats Regulations Assessment (HRA) on proposed plans in order to establish the likely significant impacts. This has been conducted on the Waste Core Strategy and additional assessments will be carried out as new DPDs are produced.

A possible approach for locating future waste management sites is outlined below.

Draft Policy Direction WCS3: Future Waste Site Allocations

We think that we need a policy that sets out where the different kinds of waste management facility would be acceptable.

We think that the best way of doing this would be to develop a Key Diagram which shows, in broad terms, on a map base, where new waste management facilities will be permitted. Potential developers would therefore be able to apply for planning permission with some confidence, subject to the need to assess the effect of the specific proposal on a particular site.

We think that it should make special protection for the Cotswolds and Malvern AONBs.

In the interests of sustainable development, we think a policy also needs to demonstrate a commitment to using the most appropriate transport routes within and around the County and to implement sustainable modes and methods of transportation. We also think that we also need to allow some Waste, such as C and D, to be treated where it is produced - subject to the proposal being time limited to the development itself and being environmentally acceptable. It will not be possible to propose where such proposals would be acceptable on a map.

Do you agree? Please comment on Question 7 below.

Unallocated Sites

PPS10 states that applications for sites that have not been identified in a development document as suitable for new waste management facilities should be considered favourably when consistent with national policies and the Waste Core Strategy. We intend to identify broad locations for new facilities but we do not think that it would be realistic to plan for a close fit between what we think is needed and sites - we need to be flexible. We believe strongly that sites will be needed to manage new kinds of waste in relation to changes in market demand and new commercial or technological opportunities. We need a balance between providing certainty where we can and flexibility to enable the market to flourish. We think therefore that we need to provide a decision making framework to manage and enable market flexibility. We also need to promote the development of waste facilities where there will be significant, but currently undefined new industrial and housing development. We anticipate that such development will be set out in future District Council Development Plans, but we need to prepare how to deal with the possible waste implications of such development in advance.

We think that we need a policy which will enable proposals to develop waste facilities on sites which were not aware of when we adopted the plan.

Draft Policy Direction WCS4: Unallocated Sites

We think such a policy would include that proposals for the waste management related development on sites not identified in the Waste Core Strategy could be permitted where they met certain criteria such as that:

They are consistent with the appropriate waste planning policies and objectives, are compatible with moving the management of waste up the waste hierarchy and do not compromise the achievement of the Strategy.

They are at least as sustainable as the sites we identify in the Key Diagram and are supported by an independent Sustainability Appraisal/Strategy Environmental Assessment (SA/SEA) and other relevant assessments. We think that any such SA/SEA should include a full consideration of the appropriate alternative sites and the implications for protected species, habitats and features of the proposal and that they are on sites which comply with national and regional policy (e.g. with existing permission for waste management related uses or on previously developed land or redundant agricultural or forestry buildings). We need to make provision that Greenfield sites may be acceptable provided that the proposal does not result in significant adverse impact on the countryside or its functions, that proposals would be compatible with their setting and would not have unacceptable direct or indirect impacts on matters of acknowledged importance in national, regional or local policy and that they would not significantly conflict with other spatial planning objectives in the Local Development Framework.

Do you agree? Please comment on section 7 below.

How much Waste Management Capacity do we need?

National policy, in para 2 of PPS10, requires us to:

"provide sufficient opportunities for new waste management facilities of the right type in the right place at the right time."

The starting point for this must be how much waste management treatment we need to provide. We have set out the issues in Part 5 and 6 above. We think that it would be useful to set out both the broad principles and the specific amounts of what we need and when. We must have regard to the targets in the RSS but we think that we need to aim higher than these to achieve our Vision. We also need to set out how much capacity we need. At the same time, however, we need to ensure that we avoid spurious precision and retain sufficient flexibility to allow technical innovation and market opportunity to be realised.
We think that it would be useful to have a policy which sets this out, e.g.

Draft Policy Direction WCS5: How much waste treatment capacity do we need?

On the basis of our proposals above, such a policy would require that sufficient waste management capacity will be provided in Worcestershire before 2027 to manage the equivalent of the waste arisings within the County.

For MSW: this would be:
reducing the volumes of MSW produced per head in Worcestershire to the following:

Kg per household	
Current level	849
Target 2010	572
Target 2015	524
Target 2020	443

(estimates subject to ratification)

and achieving national/recycling composting levels of household waste of:

- 40% by 31st March 2010
- 45% by 31st March 2015

with a local target of:

- 43% before 31st March 2014 (and a commitment to review its ability to meet the 2015 target then) and
- 50% by 31st March 2020;
  - recovering value from a minimum of 78% of MSW;
  - reducing the amount of bio degradable MSW landfilled to
    154,164 tonnes during April 2009-March 2010
    102,684 tonnes during April 2012-2013
    71,851 tonnes during April 2019-2020.

For Commercial and Industrial Waste:
This would mean reducing the percentage landfilled to 25% of the total or less, by providing and safeguarding sufficient facilities to achieve the following targets.

2010/11		2015/16		2020/21		2025/26		2035/36	
a	**b**	**a**	**b**	**a**	**b**	**a**	**b**	**a**	**b**
632,077	210,692	680,638	226,879	735,848	245,283	798,619	266,206	951,124	317,104
New Capacity Needed (tonnes)									
524,257		572,818		628,028		690,799		843,505	

Key:
a - Min Diversion from Landfill **b** - Max Landfill

For Hazardous Waste: By providing and safeguarding sufficient facilities to manage at least 49,000tpa in Worcestershire.
For Construction and Demolition Waste: By providing and safeguarding sufficient facilities to manage at least 510,000t pa by 2021
For Waste Transfer purposes: By providing and safeguarding sufficient capacity to match a ratio of 1tpa of transfer capacity to 3tpa of total management capacity in the County.
For Landfill: By safeguarding existing permitted void space, monitoring progress and developing policies and criteria to identify new sites at the end of the life of the Strategy.

Do you agree that it would be useful to set out what we need in such detail? Please comment on Question 7 below.

Unimplemented Permissions

There is a significant potential waste management capacity in current, but unimplemented permissions in the County. There is a time limit on each by which it must be commenced. We anticipate, however, that most of these will be implemented and will therefore contribute to meeting the "Capacity Gap". There is a risk however that if we do not recognise these permissions we will overestimate how many sites we need to identify. We think that the solution will be to safeguard these sites until they are either implemented or can be judged to be no longer necessary for waste management purposes. This will have the effect of reducing the number of new sites we need to identify. We intend to monitor progress with such sites and adjust the Capacity Gap accordingly each December in our Waste and Minerals Annual Monitoring and to use our findings to judge decision making accordingly.

Obtaining planning permission and identifying appropriate sites for waste management related development can be difficult. It is therefore necessary to ensure that operational sites, sites with planning permissions that have not yet been implemented and areas proposed for waste facilities are not compromised by inappropriate development in their proximity. We think that we need a specific policy to ensure that this does not happen, so that when we are consulted by District Councils we have a basis for protecting waste sites.

Draft Policy Direction WCS6: Safeguarding:

We think that such a policy could state that proposals for defined kinds of development, within a defined distance on existing or proposed waste facility or site identified in the Key Diagram will be permitted, provided that:
The operation of the waste management facility is not or would not be significantly affected; or
The waste management facility, proposed or existing, is no longer required or is not suitably located in relation to its function or impacts and either that there is adequate and appropriate capacity in the County or in proximity to the waste now and in the future to manage the waste that the facility treats; or the existing facility can be relocated to a more suitable and equally sustainable location; or The development proposal would not suffer unacceptable impacts as a result of the operation of the waste facility.
The corollary being that if the above criteria are not met, that we will object to the proposal and will expect the District Council to refuse it on the grounds that it would compromise the achievement of the Waste Core Strategy.

Waste Reduction:
We think that some increase in some waste streams is inevitable. Waste reduction is therefore of key importance. We need to help reduce the amount of waste produced at source.
We think that it would be useful to develop Preferred Options on the basis that:

- we specify that certain kinds of development should include facilities to enable their occupiers or users to reduce waste production and maximise opportunities to manage their waste; and
- we require proposals for such development to include a waste audit, and that the following would be a useful way to do so:

Draft Policy Direction WCS7: Assessing the Waste Implications of New Development

Proposals for the following:

- developments of a certain size (e.g. ten or more dwelling units) (i.e. houses or plots);
- shopping or leisure facilities (e.g. with a floor space of 500 square metres or more);
- business, industrial, distribution or storage development with a defined floor space (e.g. of 300 square metres or more); and
- all other kinds of development with a defined floor space (e.g. of 500 square metres or more) must:
- include facilities for the occupiers to separate and store the wastes produced to enable other recycling or composting unless adequate provision exists already; and
- be accompanied by a waste audit which must include specified details of, for example,

- the type and volume of wastes likely to be produced during the construction of the site, including site clearance and the excavation of foundations;
- how such wastes will be reduced, re-used or recycled during the development process;
- how the pollution potential of such wastes will be minimised;
- how such wastes will be disposed of;
- how wastes produced during the occupation of the site will be managed to maximise their reuse, recycling, composting or use for energy recovery;
- how the landfilling of waste from the site will be minimised and
- how all such waste will be stored and transported.

And include a requirement that, for example, all other proposals for development requiring planning permission or prior notification under the Permitted Development Regulations will be required to show how wastes produced during the construction and use of the site will be managed.

Do you agree that this would be useful? Please comment on Question 7.

What kind of Facilities do we need?

There are many ways to manage waste. You can find out more about the most common types of facility in our background document, "Types of Waste Management Facilities" and of what already exists in Worcestershire in the report, "Waste Sites in Worcestershire" both on ***www.worcestershire.gov.uk.***

What alternatives have we considered?

We looked at:

- specifying exactly what facilities we need;
- specifying the capacity that needs to be provided and leaving it to the market to decide how it wants to do so.

We do not think that the first is realistic. We think that it would be unrealistic and misleading to specify what kind of facilities we might need in future. New technologies and new market opportunities will emerge during the life of the Strategy and we do not want to frustrate them. The Economic Strategy for Worcestershire specifically promotes the development of high technology jobs and the RSS promotes a high technology corridor through the County. These alone could generate unforeseen possibilities, quite apart from those which might emerge from the rest of the economy. We think therefore that in general terms we should promote facilities which reflect and support the local economy rather than try to guess what these might be. On the other hand, we can identify some specific kinds of development which are likely and we think that it would be useful to set these out where we can and that it would be useful to have a policy to do so.

Draft Policy Direction WCS8: What kind of facilities do we need?

Such a policy would set out that sufficient types of facility and technology will be permitted to reflect and support the waste management needs of the economy of Worcestershire.

We could also specify that proposals will however be required to

- Identify the kind and broad origin of the wastes to be managed; and
- Demonstrate that the wastes involved could not have been managed more sustainably by using a solution at a higher level of the Waste Hierarchy.

Where we can do so however we could state these will include the facilities we have already identified. These will include at least the following:

- Thermal treatment capacity of at least 250,000tpa;
- Recycling Site in the principal and market towns in the county;
- Composting or Anaerobic Digestion capacity for at least 25,000tpa of MSW throughout the life of the Strategy; and 50,000tpa of biodegradable C and I waste; and a number of smaller sites with a capacity of up to 6,000tpa to address primarily rural sources of biodegradable material;
- Capacity to manage at least 108,500tpa of MSW at a Materials Reclamation Facility;
- Other types and sizes of facilities to enable the targets in this Strategy to be met.

Do you agree that this would be useful? Please comment in Question 7.

Special Kinds of Waste Management Facilities

In general, we think that most kinds of facility and technology should be addressed generally in terms of their impact rather than what they are. Some kinds of facility do however have specific characteristics which justify special consideration. We think that Policies for Energy from Waste and Landfill facilities would be useful.

Landfill

It is government policy to minimise the amount of waste landfilled and regional policy to restrict the granting of new planning permissions for landfilling (the term includes landraising for waste disposal purposes) to proposals which:

a) are necessary to restore despoiled or degraded land, including mineral workings;

b) are otherwise necessary to meet specific local circumstance;

c) are supported by robust evidence of suitability and need arising from a shortage of local capacity that exists in the plan period; and

d) where geological conditions are suitable for landfill operations; and also

e) to identify final disposal sites for Hazardous waste, including where necessary the creation of appropriately engineered landfill cells f or Stabilised Non-Reactive Hazardous Waste where the geological conditions are suitable.

We believe that we may have enough landfill capacity to meet the County's needs during the life of the Strategy but that there are some uncertainties in this regard and that the creation of sufficient voidspace will depend upon the scale of other development in the County. It is clear, however, that we will need additional landfill space in the County beyond the life of the Strategy. We think therefore that we need to develop Preferred Options which generally limit the development of future landfill space but make it possible to do so if circumstances dictate and, in particular, that we need to assess whether we need, and if the geology would enable, cells for Stabilised Non-Reactive Hazardous Waste in Worcestershire. You can find out more about landfilling in our background paper, "Landfilling" ***(www.worcestershire.gov.uk/wcs)***.

We think however that we need to ensure that residual wastes can be landfilled locally until alternative management facilities become established. The Joint Municipal Waste Management Strategy identifies the need for a facility or facilities to thermally treat 250,000t of MSW pa. Delays in opening any such facilities will however lead to increased landfilling. We think that we need to make contingencies in case this happens. Overall we think that only limited planning permissions should be granted for new landfills. We think that we need a policy which addresses these issues:

Draft Policy Direction WCS9: Landfill

Such a policy could specify that no further planning permissions for Non Inert landfill sites will be granted unless certain provisions are met. These could include that:

- there is clear evidence that there will be a shortfall during the life of the Strategy; and
- that there is no suitable waste management option at a higher level in the waste hierarchy in Worcestershire for the wastes proposed to be landfilled; or
- that the proposal is essential for operational reasons and is the only demonstrable option;

We would however also need provisions that planning permission will be granted for new Inert landfill sites where justified. We think that possible justifications could be that:

- it can be demonstrated that the waste cannot be managed in a more sustainable way but special provisions would be needed to ensure that the proposal would comply with the objectives of the Worcestershire biodiversity or geo diversity Action Plan and the County Landscape Appraisal and in the opinion of the relevant statutory body would improve:
- the setting or condition of any protected features nearby (e.g. of historic, archaeological or cultural or nature conservation value) or
- surface water or groundwater conditions or flood management or
- the viability of any agricultural or forestry unit involved or
- the landscape character of the land or

if it were appropriate, that it could be argued the proposal is essential for operational reasons or the restoration of brownfield or derelict land or a minerals site. We think that in such cases we would want evidence that it was nonetheless the best demonstrable option; and
in all cases we think that we should require that adequate provision is made for the management of landfill gas to maximise the amount of energy produced.

Do you agree? Please comment on Question 7.

Energy from Waste:

Waste Strategy 2007 (p76) states that,

> "Recovering energy from waste which cannot sensibly be reused or recycled is an essential component of a well balanced energy policy…recent sharp increases in energy prices and continuing instability…underline the importance of maximising energy recovery from the portions of waste which cannot be recycled."

Recent changes in financial support and the definitions of what is eligible are intended to encourage greater recovery of renewable energy from waste in England. The government, "does not generally think it appropriate to express a preference for one technology over another, since local circumstances differ so much", but it does specifically "wish to encourage local authorities and businesses to consider using anaerobic digestion" (op cit p78 and 79). The JMWMS identifies the need for some kind of thermal treatment to manage up to 250,000t of residual waste. We anticipate that proposals for this and other energy from waste schemes, if only for the management of landfill gas at existing sites, are likely to be made over the life of the Strategy. We think that we should have policies to address this.

Waste Strategy 2007 notes that the recovery of energy from waste has been held back by public fears over alleged health effects and fears that the development of suitable infrastructure would lock in wastes which could otherwise be recycled. It is however quite clear that:

> "Research carried out to date shows no credible evidence of adverse health outcomes for those living near incinerators…the available research demonstrates an absence of symptoms relating to exposures twenty or more years ago when emissions from incinerators were much greater than they are now…" (p77) and
> "Evidence from neighbouring countries, where very high rates of recycling and energy from waste are able to coexist, demonstrate that a vigorous energy from waste policy is compatible with high recycling rates" (p78).

The range of technologies generating energy from waste is wide and you can find out more about them in our background paper, "Energy from Waste" ***(www.worcestershire.gov.uk)***.
We think that energy from waste could be a useful part of the Strategy, provided that safeguards are in place to ensure that energy from waste proposals do not crowd out recycling and that the special issues relating to it, such as potential pollution and health risks, are properly addressed by the statutory bodies responsible. A possible policy could be:

Draft Policy Direction WCS 10: Energy from Waste

Any such policy would need to specify Planning Permission will be granted for energy from waste proposals, provided that it was basically sustainable. We would need to set criteria to require at least that:

- the sorting of waste is carried out,
- energy recovery is maximised;
- value recovery from by-products is maximised;
- we would also need to ensure that residues can be satisfactorily managed and disposed of and the statutory health protection and pollution control bodies are satisfied that the proposals are acceptable.

Do you agree? Please comment on Question 7.

Determination of Planning Applications
One of the principal purposes of the Waste Core Strategy is to set out how sites will be assessed and applications for planning permission for waste management related development will be determined. Government policy requires that such policies should accord with but not repeat or reformulate national and regional policy. In theory, therefore, we could simply apply Planning Policy Statements and Regional Planning Policy and do not need to reiterate them. In this regard, Annex E of PPS10 provides a useful context. There are however contradictory pressures in government policy which suggest that this basic approach would not be found sound. PPG16 (para 15), for example, requires Councils to include policies on protection, enhancement and presentation. PPS12 also requires Councils to include policies which are "locally distinctive". There is no advice on what this means. The Planning Inspectorate seem however to interpret it as referring to matters or places in the area covered by the Strategy. We think therefore that there may be a need for "Development Management" policies in the Strategy to ensure that:

- measures are incorporated into proposals to mitigate the environmental impacts of waste management and transportation;
- policies which help protect local features, designated sites and areas and matters of local concern.

This is difficult to achieve. We have therefore set out a list of issues to show attention to specific issues we would value your opinions on whether it would be useful to include any such policy and whether these are the kinds of matter we should include.
We think that it would be useful to list these in fairly broad terms so that the issues which matter are drawn to everyone's attention at the outset. We can use this to refer to specific documents and strategies which are not specified in national or regional policies and that these will enable the "local distinctiveness" prescribed in national policy.

Draft Policy Direction WCS 11: Managing the Impact of Waste Management Related Development

We think that such a policy could state that proposals for waste management related development in Worcestershire will be permitted where they do not have unacceptable impacts on the natural resources (e.g. air, water and soil) and environmental and social, cultural or economic assets of Worcestershire. We think that it might be useful in this context to require that proposals accord with local policies (which will generally include requirements for enhancement where possible). This would make the policy "locally distinctive". We think that these could be listed. We are aware of the following:

- the need to protect the Bredon Hill, Lypett Grange Ponds, Dixton Wood, Fens Pools, River Wye/Afon Gwy, Walmore Common and Severn Estuary SAC/SPA and RAMSAR Sites, the SSSIs in and adjoining the county and protected species associated with them,
- the Worcestershire Biodiversity Action Plan and Regional Landscapes for Living concept; the Worcestershire Geodiversity Action Plan; the Cotswolds and Malvern Hills AONB's Management Plans and that we should refer to the need to protect the distinctive character and setting of historic and archaeological features and settlements in Worcestershire in accordance with current and future Historic Environment Planning Policy.

We could list the following:

- the Worcestershire Landscape Character Assessment principles;
- the County Woodland Guidelines;
- the Worcestershire Economic Development Strategy;
- the Strategic Flood Risk Assessments and Water Strategies undertaken for Worcestershire;
- the Catchment Management Plans and associated surface and groundwater protection and flood management policies undertaken by the Environment Agency for water catchments in, or potentially affecting or affected by, developments in Worcestershire.

Do you think that this is a useful list? Are you aware of omissions?

We could also require that any adverse impacts on amenity (caused by, for example, noise, odours, fumes, dust, litter, hours of operation or from the cumulative effect from any such impacts) must be minimised by effective mitigation measures.

Do you think that it could be useful to specify, in particular, that these measures accord with the Herefordshire and Worcestershire Air Quality Strategy and Policy Protocol?

We could also require that the following issues are addressed:
That appropriate mitigation measures and/or compensation to minimise any potential nuisance which might be caused by, or attracted to the facility; and to the need for a standard of design which contributes positively to the character and quality of the area; and the proposal is consistent with the principles of sustainable design, has or can achieve acceptable access to the principal road network and accords with the provisions of the Local Transport Plan for Worcestershire and the proposal is in general accord with other spatial planning objectives set out in the Local Development Frameworks for Worcestershire.

Do you agree? Please comment on Question 7.

Other Matters of Concern

We think that there are also a number of other matters which are not explicitly dealt with in government policy, which the final Core Strategy could usefully address. The issues we think could be important are listed and set out below and are covered by a single question at the end of this section. Please feel free to comment on these and any other matters you think that we need to consider.

The Restoration and After-care of Waste Sites

This is an important part of national, regional and the County Council's own "Saved" Structure Plan policies but we think it needs to be specifically applied to waste management related development. We think that provision for site restoration could be important for any site where there is the possibility that it might be left in a state which makes redevelopment difficult or time consuming (e.g. because polluting or hazardous materials were involved), or where it is a natural part of the development itself to change from one kind of land form to another (e.g. a landfill or land raise). Any such policy could require applications for such sites to set out how they would be restored to an agreed landform and beneficial after use. Closed landfills require long term monitoring and cannot easily be used afterwards. They could however offer the opportunity for significant long term biodiversity gain. In particular they offer opportunities for the creation of grassland habitats which are amongst Worcestershire`s most important and most threatened habitats.

We could also require that that they be maintained after restoration is complete. (Five years is the longest time that mineral workings can be tied to an aftercare scheme. Longer periods can only be achieved by voluntary agreement. We believe that the same requirements could be applied here.) Do you agree? Please comment on **Question 5** at the end of this section.

Control of Landfill Mining:

It is becoming common in some countries to excavate old landfills and recycle their contents. It has been suggested that landfill sites filled since the late 1980s would be the most attractive in this regard. Such sites were more effectively controlled than older ones and records exist of what kinds of materials were tipped. Such sites would probably need to have been left for at least 20-30 years after closure to allow organic material to decompose and gases to escape. They may then be relatively easy to work. The issue could therefore become important during the life of the Strategy.

In principle, this could be a useful way of reusing some resources. In practice, there could be considerable risks to the environment and the amenities of local people. The activity is akin to mineral working but none of the national and regional policies for minerals directly apply. We are not aware of any proposals to carry out landfill mining in Worcestershire or of any former landfills which contain valuable materials. We think however that it would be useful to prepare for any such eventuality. Do you agree? Please comment on **Question 5** at the end of this section.

Control of "Landscaping" and "Noise Mounds":

New development often needs new foundations to be dug. Some of the excavated material (e.g. rubble) can be reused as substitute aggregate, some (e.g. topsoil) can be sold or used to improve the quality of soils on the rest of the site. Some materials, particularly subsoil, are however of no value and need to be disposed of. Landfilling such material is expensive. It is therefore frequently left on site, often shaped into artificial looking mounds on the pretext that these constitute "landscaping" or "noise" attenuation. We believe that this kind of development is undesirable, is often overlooked and should be controlled. We believe that such "landscaping" should be in accordance with local policy, such as the Worcestershire Landscape Character Assessment, and that evidence that noise attenuation is necessary and that any such proposals would achieve it should be provided as part of a planning application before they should be permitted. Do you agree? Please comment on Question 5 at the end of this section.

Prescription of what Councils in Worcestershire should require in connection with waste deposited under Permitted Development (PD) Rights:

Certain kinds of development have "deemed planning permission", i.e. they do not require a specific planning permission to be granted. These are known as Permitted Development (PD) Rights. We are particularly concerned that some of these, notably the deposit of waste materials on farms or forestry land, can have adverse effects. In particular, such deposits can damage features of nature conservation, archaeological or landscape value. We are concerned that as much care as possible needs to be undertaken to assess the value of such sites before waste is deposited. The legal requirements are set out in "The Town and Country Planning (General Permitted Development) Order 1995, as amended. They include a requirement on landowners who propose to deposit waste materials on agricultural or forestry land for the purposes of agriculture or forestry (e.g. to construct tracks, create hardstandings or level land) to give "Prior Notification" to the local planning authority before they do these works. The Regulations set out that, if required, landowners must submit details of the proposal to the local planning authority and advertise it by putting notices on the site. We believe that it would be useful to adopt a County-wide approach to this procedure. In particular, we want to ensure that enough information is requested from the applicant to enable the relevant Council to see if the proposal would require specific planning permission and/or might damage features or species of local (or wider) value and that there is a consistent approach to what is both requested and encouraged or discouraged throughout the county. In such cases, the Council could seek changes to the proposal to protect those features. The information requested could enable specialists to see if a site inspection or investigation might be necessary. The benefits to the landowner could include gaining the certainty that their proposal is acceptable, the identification of hitherto unrecognised features for which grant aid (e.g. Stewardship funding) might be available and ultimately avoiding possible prosecution (if protected species are involved).

The benefits to the Councils would be reductions in enforcement activity and the protection of valuable local features. It would assist the Strategy by preventing waste being moved around the County to take advantage of different interpretations of what is acceptable.

Do you agree? Please comment on Question 5 at the end of this section.

Clarification of a County-wide Approach to Local Recyclable Collection Points:

It is national policy to encourage the collections of recyclable materials. We want to encourage this by making it as easy as possible. Many organisations allow "Bring Points" (waste collection points), e.g. bottle or paper banks and shoe, battery or clothing collection bins, to be put on their land. The planning status of these collection points is ambiguous.

It is rare for them to be granted a specific planning permission. They are usually regarded as "ancillary to the main use" of the site and tolerated. We want to foster the use of such collections but we want to make sure that they are sited where they do not cause harm to the amenities of local people or matters of acknowledged importance. We think that it would be useful to have a policy which sets out a general encouragement for the establishment of Local Recyclable Collection Points but which also set out criteria so as to justify and make it easier for Councils to take enforcement action if the location was inappropriate. One way of doing so would be to expressly state that even though such collection points may be "ancillary", they must nonetheless comply with the relevant policies in the rest of the Strategy.

Do you agree? Please comment on Question 5 below.

Q.5 Do you think that it would be useful to develop Preferred Options which include policies to address:

	Yes	No
The Restoration and After-care of Waste Sites;		
Control of Landfill Mining;		
Control of "landscaping" and "noise mounds";		
Description of what Councils in Worcestershire should require in connection with waste deposited under Permitted Development (PD) Rights		
Clarification of a County-wide approach to Local Recyclable Collection Points?		

If no, please could you explain why and suggest alternatives.

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Q.6 Do you think that it would be useful to develop Preferred Options along the lines of the draft policies included in Part 8 of this document?

Draft Policy No		Yes	No
WCS1	Ensuring Sustainable Development		
WCS2	Broad Hierarchy		
WCS3	Future Waste Site Allocations		
WCS4	Unallocated Sites		
WCS5	How much Waste Capacity do we need?		
WCS6	Safeguarding		
WCS7	Assessing the Waste Implications of New Development		
WCS8	What kind of facilities do we need?		
WCS9	Landfill		
WCS10	Energy from Waste		
WCS11	Managing the Impact of Waste Management Related Development		

In all cases, if no, please could you explain why and suggest alternatives or additions.

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Monitoring

We need to develop a monitoring system to assess progress with and the adequacy of the Strategy.

Q.7 Do you think that the indicators set out overleaf could be useful for monitoring?

Yes ☐

No ☐

f no, please could you explain why and suggest alternatives or additions.

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Table 8: Proposed Monitoring Indicators

Theme	Objectives	Core Strategy Policies	Subject	Indicators	Data Source/ Responsible Body	Baseline	Target or Milestones	Target Source
Waste Management	2	5	Household waste	Residual - kg/head NI191 % recycled or composted **NI 192**	Municipal Waste Management Partnership **WCC**	806kg/head 2000	572kg/head by 2010 524kg/head by 2015 443kg/head by 2020 40% by 2010 43% by 2014[8]	LAA MWMS
		10	Municipal waste	annual tonnage **NI 193** recovery of value			Recover value from 70% by 2015	Waste Strategy 2007
		9	Biodegradable municipal waste	Tonnes landfilled			LATS targets	LATS
			C and I waste	% landfilled	Environment Agency		25%	Waste Strategy 2007
	2		C, D & E waste				Notional target of 50% reduction of 2004 level by 2012 impossible due to lack of data. Revision anticipated.	Waste Strategy 2007
			Hazardous waste	Waste Managed		49,000t 2007	49,000 tpa	WCC
	2		Landfill	Non-inert void space				
			Flytipping	Incidents	DEFRA		None set	
			M & W capacity	Meeting national policy Capacity consented (by type) **COI 6b**	Planning applications	NDA - strategy and plans Major municipal waste treatment facilities by target dates		MWDF
	2		Secondary aggregates	C, D & E waste landfilled[9]		See above Maintaining recycling Capacity		MWDF

[8] No target is possible for total arisings. Kg/head is the preferred method.

[9] Construction and Demolition Excavation waste landfilled is a proxy indicator for Core Output Indicator 5b, production of secondary and recycled aggregates which has been impossible to ascertain with any accuracy. No annual target is appropriate as it will fluctuate with development cycles. A watching brief will be kept and any increase in the landfill figure will be investigated. A reduction could indicate increased use of recycled aggregates.

Table 8: Proposed Monitoring Indicators (continued)

Theme	Objectives	Core Strategy Policies	Subject	Indicators	Data Source/ Responsible Body	Baseline	Target or Milestones	Target Source
Water		11	Flood risk and water quality	PP granted contrary to EA advice CO17	Planning Applications	0	0	PPS 25
Habitats		11	Significant adverse impacts or enhancements	Change in priority habitat on planning applications with EIA [10]	Planning Applications	n/a	n/a	PPS 9
Climate Change	1, 6	1		NI 185, NI 186				
Achieving the Strategy	3,5,6,8	2,3,4,6	Location of facilities	Compliance with policy	WCC planning permissions	None	100% compliance	WCC
	2,7	7	Waste implications of new development	Compliance with policy	WCC planning permissions	None	100% compliance	WCC
	4	8	What kind of facilities do we need	Compliance with policy	WCC planning permissions	None	100% compliance	WCC
Involving the public	9		Involving the public	Compliance with the SCI	WCC planning permissions	None	100% compliance	WCC
Monitoring	10		Monitoring	Compliance with the monitoring schedule	WCC planning permissions	None	100% compliance	WCC

[10] This is a proxy indicator for Core Output indicators 8a and b which are expected to be changed. The replacement for 8a and b is not specific to sites for minerals and waste development and is likely to be reported by Natural England and/or in the Regional Spatial Strategy's Annual Monitoring Report.

Thank you for your assistance. Any comments you make will be taken into account and used to inform the development of the final Strategy.

Appendix 1: Principal Policy Drivers European Policy

European Policy

National Waste Management Policy must comply with European Directives; the Health, Landfill, various waste materials and processes, Water and Environmental Impact and species protection Directives are particularly important. The aim of these Directives is to protect health and the environment, reduce landfilling and focus on resource recovery.
The Revised Waste Framework Directive 2008 will become UK policy soon. We anticipate that it will set targets requiring

- 50% of household waste and
- 75% of industrial waste to be recycled by 2020.

It is possible therefore that the national targets below will be revised relatively soon.

National Policy

National policy is driven by the need to concentrate on sustainable development and to limit climate change.
The Waste Strategy for England 2007 includes targets and indicators for waste reduction, recycling and recovery. These are: (see Table 9)

Table 9: Waste Strategy for England 2007: targets and indicators

Household waste Recycling: 2010: 40% 2015: 45% 2020: 50%	**Municipal waste recovery:** 2010: 53% 2015: 67% 2020: 75%
Household residual waste: 2010: 29% reduction 2015: 35% reduction 2020: 45% reduction from 2000 levels	**Commercial and Industrial waste landfilled:** 2010: expected 20% reduction from 2004 levels

The Landfill Allowances Trading System (LATS) has been introduced to divert biodegradable waste away from landfill. Councils are given an allowance, which may be traded, setting the maximum amounts of biodegradable MSW which may be landfilled. Councils will be fined £150/tonne if they exceed their LATS allowance.
The LATS targets for Worcestershire are:

Table 10: Landfill Allowance Trading Scheme (LATS) Targets for Worcestershire 2010-2020 (tonnes)

Target	Allocation		Target			Allocation				Target
2010	2010/11	2011/12	2013	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2020
118,656	105,448	92,241	79,033	75,643	72,253	68,863	65,473	62,082	58,692	55,302

Source: *DEFRA*

Planning Policy Statement 10, "Planning for Sustainable Waste Management" (PPS10) sets out how the government's policies should be applied in the planning system. In summary, these are:

"to protect human health and the environment by producing less waste and by using it as a resource wherever possible".

Waste planning authorities should identify in development plan documents sites and areas suitable for new or enhanced waste management facilities for the waste management needs of their areas. Waste planning authorities should in particular:

- allocate sites and areas suitable for new or enhanced waste management facilities to support the apportionment pattern and locations set out in the RSS.

In doing so, waste planning authorities should:

- demonstrate how capacity equivalent to at least ten years of the annual rates set out in the RSS could be provided;
- identify the type or types of waste management facility that would be appropriately located on the allocated site or in the allocated area, taking care to avoid stifling innovation in line with the waste hierarchy;
- avoid unrealistic assumptions on the prospects for the development of facilities, sites or areas;
- review and roll forward the Core Strategy every five years.

In searching for sites and areas suitable for new or enhanced waste management facilities, planning authorities should consider:

- opportunities for on-site management of waste where it arises;
- a broad range of locations including industrial sites, looking for opportunities to co-locate facilities together and with complementary activities.

In deciding which sites and areas to identify for waste management facilities, waste planning authorities should:

(i) assess their suitability for development against each of the following criteria:

the extent to which they support the policies in PPS10;

- the physical and environmental con straints on development, including existing and proposed neighbouring land uses;
- the cumulative effect of previous waste disposal facilities on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or economic potential;
- the capacity of existing and potential transport infrastructure to support the sustainable movement of waste and products arising from resource recovery, seeking when practicable and beneficial to use modes other than road transport.

(ii) give priority to the re-use of previously developed land and redundant agricultural and forestry buildings and their curtilages.

These are not law but the Council must have good reason and evidence to justify not complying with them.

All government policy statements are material but the following are also of particular importance:

PPS7 "The Countryside and Rural Economy";
PPS9 "Biodiversity and Geological Conservation";
PPS25 "Development and Flood Risk"; and
PPS4 "Planning for Prosperous Economies" (currently at consultation stage).

Regional Policy

The Regional Spatial Strategy for the West Midlands (RSS) sets out the broad development Strategy for the region for the next 15-20 years. The Waste (and some other) policies are being revised as part of the Phase 2 Revision of the RSS. The Secretary of State is expected to pronounce on the revision before we submit the Waste Core Strategy to him for approval. We anticipate revising the proposals we set out here as a result, **but for the present, all references to RSS policy should be interpreted as references to the "West Midlands Spatial Strategy", Phase 2 Revision - Draft Preferred Option (December 2007) and to the background evidence supporting it on the WMRA website (www.wmra.gov.uk).**

In summary, the RSS aims to:

- foster sustainability, reverse the moment of people and jobs away from the Major Urban Areas (MUAs) (Birmingham and the Black Country);
- allow significant development in specified areas (in this County, Worcester is identified as the sub regional focus and it and Redditch as settlements of significant development);
- limit development in other areas;
- set targets for housing and industrial development;
- protect the green belt and areas of natural and historic importance;
- set out specific targets for the maximum Municipal Social Waste (MSW) and Commercial and Industrial Waste that should be landfilled and the minimum provision to divert waste from landfill;
- identify locations where new waste management facilities should be provided.
- specify in broad terms how Hazardous, Construction and Demolition waste and landfill should be addressed;
- ensure that "employment land" within the region should be suitable for general industrial uses including waste management facilities.

The Waste Core Strategy should contribute to and be in "general conformity" with the RSS if it is to be found "sound".

Joint Municipal Waste Management Strategy (JMWMS)

The JMWMS is currently under review. We anticipate that it will have been adopted by the Partnership Councils before we submit the Waste Core Strategy to the Secretary of State. For the present, however, **all references to the JMWMS should be interpreted as referring to the "Joint Municipal Waste Management Strategy for Herefordshire and Worcestershire 2004-2034. First review February 2009, Consultation Document, Headline Strategy" and the accompanying Annexes A-J**.

The JMWMS focuses on:

- waste minimisation; and
- promotes the management of waste up the waste hierarchy;
- assumes that there will continue to be an element of residual MSW, estimated at 250,000tpa for which some kind of thermal treatment needs to be developed.

What other Strategies do we need to take into account?

National, regional and local policies all emphasise the need for sustainability and to achieve sustainable communities. The following are particularly important in this regard.

A "new settlement" between central and local government, their partners and citizens, set out in "Creating Strong, Safe and Prosperous Communities" (CLG July 2008), which

- sets statutory guidance on how these relationships should be conducted,
- includes a duty to involve the public in particular ways,
- requires a vision for an area "joining up" with all the other strategies and plans of organisations in and around the county and
- local priorities to be agreed.

You can find out more about what these mean in Worcestershire through "Partnership Towards Excellence", the Sustainable Community Strategy for Worcestershire ***http://www.worcestershirepartnership.org.uk/homr/index/wp-stat-countrywide.htm*** the Council's "Statement of Community Involvement" (weblink) and one of the background evidence documents: "Worcestershire Waste Core Strategy Background Document: Links with Districts & Neighbouring Local Authorities Plans and Strategies". ***(www.worcestershire.gov.uk/wcs).***

The Worcestershire Local Transport Plan 2006-2011 which

- aims to implement RSS policies; and
- sets targets to improve the local transport network and highway safety; and

The Worcestershire Climate Change Strategy, which

- identifies the issues which may affect Worcestershire; and
- sets how we need to address them.

Policies of adjoining Councils

The Waste Core Strategy also needs to contribute to and conform to the Core Strategies prepared by the District Councils in Worcestershire and must take account of those prepared by adjoining Councils.

Strategic Flood Risk Assessment (SFRA)

The SFRA will be one of the most important pieces of evidence behind the Waste Core Strategy. It will identify, in essence, areas prone to or at risk from flooding now and in the future. Waste related development is potentially polluting and it is very important therefore that we manage it so as to prevent any such risk. The SFRA will enable us to steer waste related development towards safer areas and away from those which might flood. The six District Councils are all preparing SFRAs for their own areas. Rather than duplicate this work, we intend to monitor their progress and undertake any work necessary to fill in gaps or resolve contradictions next year but before we submit the Waste Core Strategy to the Secretary of State.
You can find out more about the SFRAs being prepared in our background document, "SFRAs in Worcestershire" ***(www.worcestershire.gov.uk).***

Sustainability Appraisal (SA) and Sustainable Environmental Appraisal (SEA)

SA is a process which examines the significant social, economic, and environmental effects of the strategies and policies in Development Plan Documents (DPDs) (this includes the Waste Core Strategy) and Supplementary Planning Documents (SPDs) to allow the decisions that are made to accord with sustainable development. Since 2001 SAs have had to conform to the requirements of SEA (EU Directive 2001/42/EC), both the SA and SEA have therefore been included in the Sustainability Appraisal of the Emerging Preferred Options consultation. Similar assessments were also undertaken of both the Refreshed Options and the Emerging Preferred Options stages of the Waste Core Strategy.

You can find out more information regarding SAs and SEAs and a copy of the Sustainability Appraisal of this report at: ***www.worcestershire.gov.uk***

Habitats Regulations Assessment (HRA)

The HRA assess the likely significant impacts of the Waste Core Strategy for Worcestershire and associated policies while they are being produced on the integrity of the Natura 2000 Sites (i.e. Special Protection Areas (SPAs) and Special Areas of Conversation (SACs). The HRA assess whether there are likely to be any impacts; how significant they are likely to be; whether any mitigation measures are required; or whether it is possible to offset any likely adverse effects from the Waste Core Strategy for Worcestershire. A Habitats Appraisal has been undertaken of the work to date and will be used to inform the next stages.

Your comments are invited on both Sustainability Appraisal and Habitats Regulations Assessment
You can find out more information about HRAs and a copy of the HRA for Worcestershire at: ***www.worcestershire.gov.uk.***

Appendix 2: Worcestershire Waste Core Strategy Background Documents

To help provide a robust evidence base for the Waste Core Strategy the Council have prepared a series of background documents. These outline current thinking and have informed the approach taken to date in the development of the waste core strategy. All of these background documents are Living Document are in a state of development. They do not represent our final views, only our current thinking; any or all of it can be changed over the next year. Please feel free to suggest alternative ideas or evidence that you think we should consider. Equally, feel free to question aspects of the documents, even if you do not feel able to suggest anything positive. All contributions of any kind will be welcome.

Key Themes

- *Worcestershire Waste Core Strategy Background Document: Towards a Vision Statement*

  The document sets out the vision which is driving the Waste Core Strategy and details how it has evolved through consultation process.
- *Worcestershire Waste Core Strategy Background Document: Spatial Portrait*

  The document provides additional detail to the spatial portrait set out in this consultation. It includes a description of the County and the local factors that need to be taken into account in developing the Waste Core Strategy and places or parts of the County where special issues may exist. Where possible, these are mapped.
- *Worcestershire Waste Core Strategy Background Document: Waste Arisings*

  The document considers waste arisings in Worcestershire and makes projections about future arisings, treatment capacity and the need for facilities.
- *Worcestershire Waste Core Strategy Background Document: Capacity Gap*

  The document sets out what we need to plan for in the Waste Core Strategy. Estimates of what additional waste management capacity is needed are however subject to constant revision as facilities open and close, expand and contract and to changing assumptions about how, where and when the population and economy of the County will change. The document and the estimates of what waste management capacity we have to provide for are therefore subject to constant change.
- *Worcestershire Waste Core Strategy Background Document: Climate Change*

  The document is intended to inform the Waste Core Strategy and form a basis for addressing climate change issues. It considers greenhouse gas emissions, energy demands and the impacts of climate change on waste management facilities. Through this it considers the potential for mitigation, through reducing greenhouse gas emissions and adaptation through considered site location, layout and design.

- *Worcestershire Waste Core Strategy Background Document: Links with Districts & Neighbouring Local Authorities Plans and Strategies*

  The document identifies the aspects of the guidance 'Creating Strong, Safe and Prosperous Communities' which are relevant to the production of the Waste Core Strategy. As a result of the guidance, this paper goes on to examine the links to waste sites in Worcestershire's Districts and neighbouring Local Authorities plans and strategies. It also evaluates what these links mean for the Waste Core Strategy.
- *Worcestershire Waste Core Strategy Background Document: Waste Sites in Worcestershire*

  This document details existing waste management operations in Worcestershire, including an illustrative diagram of location and an analysis of the relationship between size and throughput. In order to gain this information, the majority of known waste sites in the County were visited between September 2008 and July 2009. During these visits operators were asked about any issues currently faced, any future changes anticipated, these meetings are summarised in the report.

  It also outlines potential constraints in the development of future waste management sites in the County.
- *Worcestershire Waste Core Strategy Background Document: Inland Waterways*

  The document was developed in response to consultation comments received on behalf of British Waterways regarding the Worcestershire County Council Waste Core Strategy: Refreshed Issues & Options Consultation. It sets out the policy context relating to Inland Waterways in Worcestershire.

Waste Streams

- *Worcestershire Waste Core Strategy Background Document: Municipal Waste*

  The document includes information relating to municipal waste in a national, regional and local policy context. It also includes details of the waste arisings and available capacity for treatment of municipal waste within the County.
- *Worcestershire Waste Core Strategy Background Document: Commercial and Industrial Waste*

  The document includes information relating to Commercial and Industrial waste in a national, regional and local policy context. It also includes details of the waste arisings and available capacity for treatment of municipal waste within the County.
- *Worcestershire Waste Core Strategy Background Document: Agricultural Waste*

  The document considers waste arising from agricultural activities in Worcestershire. It examines what agricultural waste is, how it is treated and explores the planning permitted development rights. It also includes information relating to agricultural waste in a national and regional policy context and identifies the potential options for making provision through the Waste Core Strategy.

- *Worcestershire Waste Core Strategy Background Document: Hazardous Waste*

  The document considers hazardous waste arising in Worcestershire. It includes information relating to hazardous waste in a national and regional policy context and includes details of the demand and available capacity for the treatment of hazardous waste within the County.
- *Worcestershire Waste Core Strategy Background Document: Waste Arisings from Healthcare and Related Activities: Clinical Waste and Low Level Radioactive Waste*

  The document considers waste arising from health care and related activities, focusing on Clinical waste; and Non-nuclear low level radioactive waste. It includes information relating to clinical waste and non-nuclear low level radioactive waste in a national, regional and local policy context. It also includes details of the demand and available capacity for treatment of clinical and non-nuclear low level radioactive waste within the County.

  Annex I considers low level radioactive waste from the nuclear industry in more detail, however it is not felt to be a significant issue in the County and is, therefore, not considered in the main body of the report.

Management Facilities

- *Worcestershire Waste Core Strategy Background Document: Types of Facilities*

  The document is intended to be a simple guide that gives an overview of the processes that tend to happen at a range of different facilities and lists the things that might need to be thought about when deciding where a facility would be best situated. It also sets out some of the possible impacts and benefits of each type of facility.
- *Worcestershire Waste Core Strategy Background Document: Landfill*

  The background paper includes background data and considers issues around types of landfill, the national, regional and local policy context. It also details of the demand and available capacity for landfill within the County, based on EA data and the Council's own research.
- *Worcestershire Waste Core Strategy Background Document: Metal Recycling Sites*

  The document considers all sites in Worcestershire involved in the recycling of metal, this includes sites which sort, bulk and/or process metal and any other sites that form part of the chain of processes of recycling waste metal into a material which can be re-used. It sets out the context and background data relating to metal recycling, detailing the demand and available capacity for metal recycling within the County.
- *Worcestershire Waste Core Strategy Background Document: Waste Transfer Stations*

  The document considers Waste transfer stations, looking at the current need and capacity in Worcestershire and wider policy context.

- *Worcestershire Waste Core Strategy Background Document: Resource Recovery from Biodegradable Waste: Composting and Anaerobic Digestion*

  The document considers composting and anaerobic digestion. These treatment options are considered in the same document as both offer the opportunity to recover resources from biodegradable waste. It sets out the context and background data relating to composting and anaerobic digestion. It considers the national, regional and local policy context and details the demand and available capacity for composting and anaerobic digestion within the County. The Waste Development Framework is concerned with the need for facilities during the plan period; therefore it does not cover issues relating to home composting.

- *Worcestershire Waste Core Strategy Background Document: Recovering Energy from Waste: Biological and Thermal Treatment Technologies*

  The document sets out the context and background data relating to biological and thermal technologies for recovering energy from waste including anaerobic digestion, incineration and refuse derived fuels. It considers the national, regional and local policy context and considers the demand and available capacity for composting and anaerobic digestion within the County during the lifetime of the Waste Core Strategy. There is some overlap with the Worcestershire Waste Core Strategy Background Document: Resource Recovery from Biodegradable Waste: Composting and Anaerobic Digestion.

- *Worcestershire Waste Core Strategy Background Document: Waste Water Treatment Infrastructure*

  The document examines the need for waste water treatment infrastructure in Worcestershire. It includes information relating to waste water treatment in a national, regional and local policy context. It also proposes a possible way forward for the potential issues regarding who is responsible for what aspects of managing waste water treatment and related development.

Appendix 3: Definition of Municipal Solid Waste (MSW)

MSW includes all waste under the control of local authorities or their agents acting on their behalf. It includes all household waste, street litter, waste delivered to council recycling points, municipal parks and garden wastes if the Council collects it, civic amenity site waste and some commercial waste from shops and smaller trading estates where local authority waste collection agreements are in place. Household waste includes waste from household collection rounds, bulky waste collection, hazardous household waste collection garden waste collections, plus waste from services such as street sweeping, litter and civic amenity sites. The definition also covers waste from schools, if the local authority collects it. Municipal waste, including fractions which are separately collected, is classified in the European Waste Catalogue as EWC Code 20. Municipal waste is generally considered to be non-hazardous, but can include hazardous materials. Any hazardous materials which are collected (e.g. paint and garden chemicals) require consignment and management as hazardous waste.

Local authorities have a duty to provide waste collection facilities for commercial users but can charge for it and, where collected, these too are counted as municipal waste arisings. This could include industrial and commercial waste and also waste arisings from facilities such as nursing and residential homes for the elderly. In the West Midlands, the quantity of commercial waste collected by local authorities generally represents only a small percentage of the total quantity of municipal waste collected.

In addition to the waste collected by the authorities, waste which would otherwise have been part of the normal household waste stream may be collected for recycling by other bodies. This can be done by commercial companies, but is more commonly carried out by voluntary groups or charity shops. Where this waste has been diverted from the municipal waste stream it may qualify for recycling credits paid by Waste Disposal Authorities in lieu of disposal costs. Municipal waste is one of the few waste streams where current, accurate data is available about the collection, movement and disposal of waste. Trend data is also available which helps to establish patterns in the recent management of this waste stream.[11]

[11] West Midlands Treatment Facilities Capacity Study Phase 2: Future Capacity Requirements (WMRA SLR) (18/11/2004 P9)

Appendix 4: Definition of Commercial and Industrial Waste

For the purposes of this report, industrial and commercial waste is the waste produced by businesses, excluding the relatively small proportion of such waste which is collected by local authorities and classed as municipal waste, those potentially more harmful wastes classified as hazardous waste and arisings from general demolition and construction activity. Industrial and commercial waste ranges from packaging wastes such as paper and card, through discarded food from catering or food processing, chemical and mineral and other wastes which are produced as residues from manufacturing, to plant and machinery which has reached the end of its working life and becomes scrap.

Generally, businesses are expected to make their own arrangements for the collection, treatment and disposal of their wastes.

Appendix 5: Calculation of MSW Arising and Projections

MSW Arisings

We believe that the most up to date and authoritative figures are from DEFRA's Waste Data Flow. The figures for Worcestershire are:

2005-6	315,502 tonnes
2006-7	318,543 tonnes
2007-8	299,863 tonnes

We also need to predict the future waste tonnages that will have to be managed. The amount and type of waste will be dependent on a number of factors including:

- The number of additional dwellings: In the period 2006 to 2026, the current Regional Spatial Strategy allocates more than 16,000 dwellings in Herefordshire and more than 36,500 dwellings in Worcestershire.
- Government policy and legislation.
- The economic climate.
- The effects of climate change.
- Demographic structure.

We need to recognise that both Worcestershire and Herefordshire have developed and adopted a Joint Municipal Waste Management Contract and PFI Integrated Waste Management Contract, at the time of writing these look likely to commit to locating the treatment and disposal facilities for both counties' MSW in Worcestershire. We intend to develop the Emerging Preferred Options on the same lines unless the Council determines differently.

The consultation on the revised JMWMS looked at five growth scenarios to estimate future arisings of MSW. The Council consulted on these estimates as part of the review of the Joint Municipal Waste Management Strategy. Scenario 3 was the preferred option and we believe very strongly that we should adopt the same. We also looked at the following to identify other possible projections for MSW:

- the four Scenarios in Waste Strategy for England (2007);
- the proposals in West Midlands Waste Treatment Facilities Capacity Study: Phase 2 Future Capacity Requirements; and
- the West Midlands RSS Phase 2 Revision Draft Preferred Options.

Unless there is good evidence to the contrary we intend however to use the following to develop Preferred Options for the Waste Core Strategy:

a) Waste Arisings as recorded by DEFRA (Municipal Waste Statistics) and
b) MSW Scenario 3 in the JMWMS first review (Annex A Consultation Document) described below in Table 12 to predict future waste growth.

Table 11: Estimated growth in MSW (tonnes) (Worcestershire & Herefordshire combined) 2010 to 2034

A forecast of MSW growth based on the latest (2007-08) tonnages for Herefordshire and Worcestershire, with the level of waste production per household remaining constant but with the number of households growing in line with Option 2 from the Regional Spatial Strategy.

Table 12: MSW Projections (Worcestershire and Herefordshire combined) (tonnes per annum)

2010	2015	2020	2034	Difference 2007/8 to 2034
405,139	421,817	438,496	485,197	82,204

Note: *Difference 2007/8 to 2034 based on a stable level of arisings per household with an annual increase with an annual increased based on the number of households*

This in effect uses the same methods as the Preferred Option in the RSS Phase 2 Report. The JMWMS Consultation is the more up to date, using the 2007/08 data as opposed to the 2003 data used for the Phase 2 Report.

We favour using the DEFRA Waste Strategy 2007 projections because they are more recent and from an authoritative source. We believe that these are the best available figures and using them also has the advantage of consistency with the JMWMS.

This has the advantage of providing an estimate well beyond the plan period.
and

c) to plan for both Herefordshire and Worcestershire's Waste in accordance with the Joint Municipal Waste Management Strategy.

We will revise these to take account of changes to the RSS estimates of household growth.
We will also monitor actual MSW arisings with these estimates, during the life of the Strategy and report developments in the Annual Monitoring Report.

Reasoning

We believe that this is a sensible way forward and we take some comfort that the estimates we intend to use:

- are derived from two different assessments (the JMWMS consultation and the RSS phase 2 report);
- were undertaken at a five-year interval;
- were undertaken by two different bodies without apparent knowledge of the other's work;
- have been adopted by two different advisory bodies (the WMRTAB and the Herefordshire and Worcestershire Waste Partnership without reference to each other)
- are the basis for the Phase 2 Revision of the RSS Waste policies; and
- were discussed at the WMRSS Phase 2 Revision Examination in Public at Wolverhampton on 27th May 2009. The Panel's response to the debate, advice to the SoS and his response will be reported in due course. Any decision will be noted on and used by us to revise our calculations.

These estimates are higher than those in Waste Strategy 2007 but follow the same basis as Regional Policy but use more up to date data than Regional Policy. We believe that a low estimate might create a misleading sense of complacency.
You can find out more about the alternatives we considered in our background paper, "Summary of Waste Arisings and Estimates of Waste Growth to 2027", on our website ***(www.worcestershire.gov.uk/wcs).***

Appendix 6: Calculation of C and I Waste Arisings and Projections

We have looked at the following to identify how much C and I waste we need to address in the Waste Core Strategy:

- The Environment Agency Strategic Waste Management Assessments
- Commercial and Industrial Waste Arisings (ADAS April 2009)
- "Waste a Future Resource for Business" Developing the evidence for a targeted market intervention strategy for the West Midlands (March 2008) (SLR) (AWM)
- EA Regional Attached Tonnage System (RATS) figures
- EA Waste Data Interrogator 2007
- National Waste Strategy for England
- RSS Phase 2 Revision Draft Preferred Options

We have considered:

Four assessments of Waste Arisings (i.e. estimates of what waste is produced) the Environment Agency Strategic Waste Management Assessments (EA SWMAs) of 1998, 2003 and 2006); and
Two estimates of Waste Managed (i.e. estimates of what wastes are currently handled in the County) Environment Agency Regis Attached Tonnage System (EA RATS) figures (2007) and the EA Waste Data Interrogator 2007; and
Two projections (National Waste Strategy 2007 and WMRSS Phase 2 Revision Draft Preferred Options) and used these to develop three Scenarios for future C&I waste arisings, viz:

- **Scenario A**: Based on Regional Policy (To follow Regional Policy RSS Phase 2 Revision Draft Preferred Options).
- **Scenario B**: Based on National Policy (To use SWMA 2002/03 as the baseline, with future projections based on Waste Strategy 2007 expectations that Industrial Waste will not increase and Commercial Waste will increase by 2.6% per annum).
- **Scenario C**: Based on the most recent data (Based on ADAS study into Commercial and Industrial Waste Arisings 2009 (Worcestershire) as the baseline, with future projections based on Waste Strategy 2007 that Industrial Waste will not increase and Commercial Waste will increase by 2.6% per annum).

These give projections based on:

- Regional Policy: a high base and high projection (Scenario A);
- National Policies: a high base and low projection (Scenario B); and
- The most recent data: a low base and low projection (Scenario C).

The projections made in these 3 scenarios are summarised in Table 13.

Table 13: C&I Waste Growth projections - Scenarios A, B and C (tonnes pa)

Scenario	2005/6	2010/11	2015/16	2020/21	2025/26
Scenario A	761,000	774,000	895,000	1144,000	1144,000
Scenario B	785,822	842,770	907,517	981,131	1,064,825
Scenario C	568,199	591,339	634,190	682,910	738,300

Any number of other Options is possible but we believe that these are realistic alternatives. You can find out more about the alternatives considered in our background paper, "Summary of Waste Arisings and Estimates of Waste Growth to 2027" on the Council's website ***(www.worcestershire.gov.uk/wcs)***.
In spite of the weight given to regional policy, Our Preferred Projection for the Waste Core Strategy is to follow Scenario B because it is based upon more recent projections which superseded those used in National Waste Strategy Review of February 2006 which informed Regional policy.

Reasoning

We believe that this is a sensible way forward. These projections are based on the Cambridge Econometrics REEIO (Regional Economy - Environment Input-Output) model. It is based on a sectoral growth model of the economy which incorporates a degree of uncoupling between economic growth and waste growth. It assumes that the various economic and regulatory measures introduced by government, such as the Landfill Tax, will continue. It also assumes a relatively low level of economic growth. Given current economic predictions following the banking crisis of 2009, we believe that this is the best approach to take at present. It is similar to RSS policy (Option A) but more up to date.

We do not think that we should favour a low projection (Option C) both because the estimates are based on arisings in another region and because we could underestimate how much C and I waste we need to address. Our Vision is ambitious. We need to ensure that enough capacity is made available. Underestimating C and I waste could undermine the Strategy.

Appendix 7: Calculation of Hazardous Waste Arisings and Projections

We considered two projections for Hazardous Waste:

- Waste Strategy 2007; and
- RSS Policy (based on the Phase 2 Future Capacity Requirements report).

The RSS policy was published in 2004 and demonstrably overestimated the increase in hazardous waste arisings likely to arise from the changes in the Hazardous Waste Regulations in 2005. We intend therefore to use the National Waste Strategy's projections of 0% increase pa for Hazardous Waste (the same as for Industrial Waste).

An alternative, to treat Hazardous Waste as Commercial Waste, does not seem justified given the nature of the activities which generate Hazardous Waste.
You can find out more about the alternatives we considered in the background paper, "Summary of Waste Arisings and Estimates of Waste Growth to 2027" on the Council's website ***(www.worcestershire.gov.uk)***.

Appendix 8: Calculation of C and D Arisings and Projections

The EA SWMA provides only limited information about the generation and management of construction and demolition waste at a sub-regional level. Some data for the West Midlands region is available from research carried out by the Symonds Group on behalf of the Office of the Deputy Prime Minister (ODPM). Four options for the disaggregation of the regional estimate are given in the Symonds survey.

RSS policy provides a useful model. RSS policy is based on Symonds option 4 that the quantity of C&D waste reflects the relative levels of housing development (as a proxy for all development), including a weighting for the proportion of development on previously developed land and the level of demolition in each area. The calculation is illustrated in Table 14 below:

Table 14: C and D Scenario 4, Calculation of Construction & Demolition Waste using Weighted Annual % Share of Housing Development 2001-2021 (tonnes pa)

	Weighted % Share to 2007	C&D Waste to 2007	Weighted % Share 2007-2011	C&D Waste 2007-2011	Weighted % Share 2011-2021	C&D Waste 2011-2021
Worcestershire	10.06	818,015	7%	510,555	6%	419,520

(West Midlands Waste Facilities: Phase 2: Future Capacity requirements "WMRA/Shropshire CC 2004)

We think that this is a useful way of calculating C and D waste. The weighted % will be changed once the Phase 2 Revision of the RSS has been extended to 2026 and approved by the Secretary of State. We intend to use the figures in the Phase 2 report for illustrative purposes now and to revise these as the likely final figures for the RSS revision emerge.

Appendix 9: MSW Summary of Targets in JMWMS

MSW: Targets

The **targets** we have to meet are set out in national policy and incorporated in the JMWMS. We believe that the only sensible way for us to proceed in developing Preferred Options for the Waste Core Strategy is to adopt the targets in the JMWMS itself. The most important of these for the Waste Core Strategy are:

JMWMS Target 3 (Re-use, Recycling and Composting)
To achieve national recycling/composting levels of household waste of 40% by 31st March 2010 as a minimum and work towards achieving 45% by 31st March 2015 and 50% by 31st March 2020.
Achieving the Target:

The aim of the target is to achieve the minimum recycling and composting levels that the Government has set in Waste Strategy for England 2007. All eight Councils in the Partnership implementing the strategy have committed and will continue to commit funding and set fees and charges in order to reach the targets through a combination of approaches including promotion, communication, collection and treatment processes.
The Partnership has set a target to achieve 43% recycling/composting before 31st March 2014. As new collection and treatment methods are introduced, the Partnership will review its ability to exceed this target in line with the 2015 national target of 45%.

JMWMS Target 5 (Recovery)
By 2015 or earlier, if practicable, we will recover value from a minimum of 78% of municipal waste.

Achieving the Target:

The aim of this target is to achieve the Best Practicable Environmental Option (BPEO) targets for Herefordshire and Worcestershire that were identified in July 2003 (a minimum of 33% of MSW to be recycled and/or composted, an additional 45% of waste to be recovered with a maximum of 22% landfilled). Whilst recognising that the BPEO is no longer part of planning guidance, it remains adopted policy within Herefordshire and Worcestershire as a target for Waste Management and Disposal purposes. National Indicator 193 will be reported as part of the monitoring of this target.

JMWMS Target 6 (Disposal)
The Partnership will work together to reduce the amount of biodegradable municipal waste landfilled in order to meet the yearly allowances set by Government under the Landfill Allowance Trading Scheme (LATS), in particular in target years as below:

154,164 tonnes during April 2009 to March 2010
102,684 tonnes during April 2012 to March 2013
71,851 tonnes during April 2019 to March 2020.
The trading scheme will be used to buy and sell allowances where this is appropriate.

Achieving the Target:

The aim of the target is to ensure that the Authorities meet the requirements of the Landfill Directive, which requires that the amount of bio-degradable waste that is sent to landfill is reduced.

The introduction of the household recycling services, the waste prevention policy and the new residual waste treatment processes will enable these targets to be met by the Partnership.

Appendix 10: Calculation of C and I Capacity Gap

C and I Waste Capacity

Defining waste management capacity is not easy but following a direct question in the "Refreshed Issues and Options" consultation in September 2008 ***(www.worcestershire.gov/wcs)*** we have decided to define the waste management capacity in Worcestershire as "actual capacity", i.e. the actual throughput of operational facilities with both valid planning permissions and waste management licences or permits. The nature of the data available is discussed in the "Arisings" background paper ***(www.worcestershire.gov.uk)***. This method is however likely to underestimate the potential waste management capacity that exists. At the very least, for example, it takes no account of:

- Unused or potential capacity at currently operational sites. AWM's report "Waste Treatment Facilities and Capacity Survey" (Final Report May 2007) (AWM SLR) estimates that the facilities they surveyed were working at 59% of their licence maximum which means that significantly more capacity is available now than we show;
- Transfer stations capacity. The same research found that 70% of waste transfer station operators who responded were currently contributing to the diversion of waste from landfill. The common diversion was 60% of the tonnage handled. We have no data for Worcestershire. We have not therefore counted this capacity either; or
- The potential capacity inherent in sites which have planning permission but are not yet operational. This is considerable (about 4 times the existing operational facility at the time of writing).

(Details of all the current operational sites and a list of those with planning permission can be found in the "Size and capacity" background document ***(www.worcestershire.gov.uk/wcs).*** We intend to review changes in actual capacity as part of the monitoring procedures in the Waste Core Strategy. We believe however that at this stage it is better to underestimate the waste management capacity of the County, rather than over-estimate it if we are to achieve our Vision. On the basis of all the above provisos, therefore, we have defined capacity as the volumes of waste recorded as inputs to permitted and licensed waste management sites in the Environment Agency Waste Data Interrogator (2007), which gives: **"Actual" capacity to manage C and I waste in Worcestershire (2007) as 107,820t.**

Capacity Gap: C and I Waste

On the basis of this capacity and our Preferred Option for developing targets for C and I waste of 75% treatment, 25% landfill discussed earlier, the capacity gap for C and I is:

Table 15: C and I Capacity Gap: tonnes

	2002/3	2005/6		2010/11		2015/16		2020/21		2025/26		2035/36	
Industrial Waste (48%)	368,950 x0% pa	369,950		369,950		369,950		369,950		369,950		369,950	
Commercial (51%)	385,050 x2.6% pa	415,872		472,820		537,567		611,181		694,872		898,215	
Total	**755,000**	**785,822**		**842,770**		**907,517**		**981,131**		**1,064,825**		**1,268,165**	
		a	**b**	**a**	**b**	**a**	**b**	**a**	**b**	**a**	**b**	**a**	**b**
Capacity needed to achieve 75% Min Diversion from Landfill		589,366	196,455	632,077	210,692	680,638	226,879	735,848	245,283	798,619	266,206	952,124	317,104
Current Capacity (2007) (EA Waste Data Interrogator)		107,820		107,820		107,820		107,820		107,820		107,820	
Total new capacity needed to achieve Minimum Diversion from Landfill				524,257		572,818		628,028		690,799		843,505	

Key:
a - Min Diversion from Landfill **b** - Max Landfill

NB: In practice, much of this gap has already been covered; since the "actual capacity" was recorded (2007) further potential waste management capacity has been created in that:

- More waste management facilities have become operational and the volume of waste handled has increased; and
- Additional planning permissions have been granted; as they become operational, the volume handled will increase even further.

For the purposes of developing Emerging Preferred Options for the Waste Core Strategy, we have however ignored these changes and will develop the plan on the basis that we need to provide new capacity to meet the entire gap.

AWM/SLR attempted to identify the geographical distribution and capacity gaps for some key waste streams. Details are set out in the Annex "Other Relevant Documents" to this report. We intend to use this material to inform the development of "Emerging Preferred Options" and to illustrate the kind of distribution and the kind of scale of new facilities needed. We anticipate better data becoming available during the development of the Strategy.

C and I Landfill

The above figures assume that 25% of C and I waste will be landfilled, giving the following requirement:

Table 16: C and I Landfill Requirement (tonnes pa)

2010/11	2015/16	2020/21	2025/26	2035/36
210,692	226,879	245,283	266,206	317,104

These give a cumulative total of: 5,127,488t to be landfilled between 2007-2027 (you can find out more in our background paper, "Landfill", ***www.worcestershire.gov.uk/wcs)***.

Dependent on how the figures are calculated, we think that the County is likely to run out of landfill space about 2027, plus or minus two years. We need to ensure that sufficient landfill space exists to dispose of residual C and I waste after the plan period. We intend to monitor actual C and I landfilling and report it in the Annual Monitoring Report to inform us more precisely when we need to identify further sites.

Appendix 11

These seven Scenarios are the Options we considered to develop the targets for C and I waste.

The different Scenarios identified are set out in Tables 45 and 46 of the "Waste Scenarios Study" WMRA/Enviros June 2005.

Table 17: Commercial and Industrial Scenarios

Scenario 1 - 'Phase 2 Report' Predictions Predicted levels of recycling/landfill diversion are extrapolated to 2020. Shortfall provided by additional treatment capacity.
Scenario 2 - No Change Shortfall in predicted capacity provided by landfill only.
Scenario 3 - 25% of treatment need provided Shortfall provided as follows: 25% of need = treatment facilities 75% of need = landfill capacity.
Scenario 4 - 50% of treatment need provided Shortfall provided as follows: 50% of need = treatment facilities 50% of need = landfill capacity.
Scenario 5 - 75% of treatment need provided Shortfall provided as follows: 75% of need = treatment facilities 25% of need = landfill capacity.
Scenario 6 - Additional treatment, all incineration Shortfall in predicted capacity provided by incineration only.
Scenario 7 - Exceed Scenario 1 Recycling Predictions Treatment capacity requirement exceeds predictions - 125% of need.
Scenario 8 - Zero Landfill No waste is disposed to landfill, all disposal capacity provided by treatment.

The sustainability score for each scenario was calculated by weighing the positive effects identified against the negative effects identified. Where there is a range of possible outcomes depending on how the scenario is implemented, the effects were weighted towards the most likely outcome. The sustainability scores, as graded in section 8.7, have been calculated by adding and subtracting the impacted effects against the appraisal criteria for each scenario.

Commercial and Industrial

The scores for the individual scenarios appraised are set out in Table 18 below in the Waste Scenarios Study in ascending order.

Table 18: Commercial and Industrial Sustainability Score

Scenario		Sustainability Score
Scenario 7:	Exceed Recycling Predictions	13
Scenario 8:	Zero Landfill	8
Scenario 1:	'Phase 2 Report' Predictions	7
Scenario 5:	75% Treatment, 25% Landfill	7
Scenario 6:	All Incineration	6
Scenario 4:	50% Treatment, 50% Landfill	-1
Scenario 3:	25% Treatment, 75% Landfill	-11
Scenario 2:	100% Landfill	-18

We agree with the authors of the WMRA/Environmental Report that scenarios 7 and 8, although highly sustainable were not realistic at the present time.

Scenarios 1 and 5 are equally sustainable; we feel however that the Phase 2 report is no longer based upon the most up to date data. Scenario 5 by context looks achievable. This is the one we propose to develop the Strategy on.

Glossary of Terms

ANAEROBIC DIGESTION - A process where biodegradable material is encouraged to break down in the absence of oxygen. Material is placed into a closed vessel and in controlled conditions the waste breaks down into digestate and biogas.

ANNUAL MONITORING REPORT (AMR) - A report that principally describes how a Local Planning Authority is performing in terms of meeting the targets and aspirations for Local Development Document preparation as set out in its three-year project plan (the Local Development Scheme). The AMR will also be used to assess how the targets in the Waste Core Strategy are being met.

AREA OF OUTSTANDING NATURAL BEAUTY (AONB) - A landscape area of high natural beauty which has special status, and within which major development will not be permitted, unless there are exceptional circumstances. Designated under the 1949 National Parks and Access to the Countryside Act. There are parts of 2 AONB's, the Malvern Hills AONB and Cotswold's AONB in Worcestershire.

BEST PRACTICABLE ENVIRONMENTAL OPTION (BPEO) -The BPEO is the outcome of a systematic and consultative decision-making procedure which emphasises the protection and conservation of the environment across air, land and water. The BPEO procedure establishes, for a given set of objectives, the option that provides the most benefit or the least damage to the environment as a whole, at acceptable cost, in the long term as well as in the short term.

BIODEGRADABLE - Materials that can be chemically broken down by naturally occurring microorganisms into simpler compounds. In the context of this document it refers principally to waste containing organic material that can decompose giving rise to gas and leachate and other by-products.

BIOGAS - Gas produced by the decomposition of organic waste in the absence of oxygen, and which can be used as a fuel.

BRING SYSTEM - A recycling system that relies on the public segregating and delivering waste materials to collection points (e.g. bottle and paper banks at local supermarkets).

CIVIC AMENITY SITE - See Household Recycling Site.

CLINICAL WASTE - Derived largely from hospitals, medical and other related practices and defined as blood, tissue and other bodily fluids and excretions from humans and animals; drugs and medical equipment; and any other waste which, unless rendered safe, may prove hazardous or infectious to persons coming into contact with it.

COMBINED HEAT AND POWER (CHP) - The combined production of heat (usually in the form of steam) and power (usually in the form of electricity). In large waste-fired facilities, the heat could be used as hot water to serve a business or even a district-heating scheme.

COMMERCIAL WASTE - Waste arising from premises that are used wholly or mainly for trade, business, sport, recreation or entertainment, excluding municipal and industrial waste.

COMMUNITY STRATEGY -The Local Government Act 2000 requires local authorities to prepare a community strategy. "A Partnership for excellence" has been adopted for Worcestershire. It sets out the broad vision for the future of the County and proposals for delivering that vision.

COMPOSTING - A biological process which takes place in the presence of oxygen (aerobic) in which organic wastes, such as garden and kitchen waste are converted into a stable granular material. This can be applied to land to improve soil structure and enrich the nutrient content of the soil.

CONSTRUCTION/DEMOLITION WASTE - Includes waste arising from the construction, repair, maintenance and demolition of building and structures.

CONTROLLED WASTE -- Comprised of household, industrial, commercial, hazardous (special), clinical and sewage waste which require a waste management license for treatment, transfer and disposal. The main exempted categories comprise mine, quarry and farm wastes. The government is currently consulting on the extension of controls to farm wastes. However, materials used for agricultural improvement, such as manure and slurry, will not become controlled. Radioactive and explosive wastes are controlled by other legislation and procedures.

CORE STRATEGY DEVELOPMENT PLAN DOCUMENT -This will be one of the most important Development Plan Documents to be produced. The County Council intends to produce both Minerals and Waste Core Strategies to define the long term strategic vision and policies for minerals and waste development in the County.

DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT (DCLG) - The Government department responsible for planning and local government.

DEPARTMENT FOR THE ENVIRONMENT, FOOD AND RURAL AFFAIRS (DEFRA) - Government department with national responsibility for sustainable waste management

DEVELOPMENT PLAN - In Worcestershire this consists of the Regional Spatial Strategy, Structure Plan, District Local Plans, and Minerals Local Plan.

DEVELOPMENT PLAN DOCUMENTS (DPD) - DPDs are spatial planning documents that are subject to independent examination. They will have 'development plan' status once adopted by the Council.

EC DIRECTIVE - A European Community legal instruction, which is binding on all Member States, but must be implemented through legislation of national governments within a prescribed timescale.

ENERGY RECOVERY - Includes a number of established and emerging technologies, though most energy recovery is through incineration technologies. Many wastes are combustible, with relatively high calorific values - this energy can be recovered through (for instance) incineration with electricity generation, gasification, Pyrolysis or refuse derived fuel.

ENVIRONMENT AGENCY - Established in April 1996, combining the functions of former local waste regulation authorities, the National Rivers Authority and Her Majesty's Inspectorate of Pollution. Intended to promote a more integrated approach to waste management and consistency in waste regulation. The Agency also conducts national surveys of waste arising and waste facilities.

ENVIRONMENTAL REPORT - Document required by the SEA Directive as part of an environmental assessment, which identifies, describes and evaluates the likely significant effects on the environment of implementing a plan or programme.

GASIFICATION - The thermal breakdown of organic material by heating waste in a low-oxygen atmosphere to produce a gas. This is then used to produce heat/electricity. It is similar to Pyrolysis.

GOVERNMENT OFFICE FOR THE WEST MIDLANDS (GOWM) -The Government's regional office. Local Planning Authorities will employ this office as a first point of contact for discussing the scope and content of Local Development Documents and procedural matters.

GREEN BELT - Areas of land defined in Structure Plans and District Wide Local Plans that are rural in character and adjacent to urban areas, where permanent and strict planning controls apply in order to; check the unrestricted sprawl of built up areas; safeguard the surrounding countryside from further encroachment; prevent neighboring towns from merging into one another; preserve the special character of historic towns and assist urban regeneration.

GREENFIELD SITE - A site previously unaffected by development.

GREENHOUSE GASES - Gases such as methane and carbon dioxide that are believed to contribute to global warming by trapping heat between the earth and the atmosphere.

HAZARDOUS WASTE - Waste which by virtue of its composition, carries the risk of death, injury or impairment of health, to humans or animals, the pollution of waters, or could have an unacceptable environmental impact if improperly handled, treated or disposed of, as controlled in the EC Directives on Hazardous Waste and defined by Special Waste Regulations 1996 (as amended) (schedule 2).

HOUSEHOLD RECYCLING SITES - Sites to which the public can bring domestic waste, such as bottles, textiles, cans and paper for free disposal. They may also accept bulky household waste and green waste. Where possible, the collected waste is recycled after sorting.

HOUSEHOLD WASTE - As a major component of the municipal waste stream, household waste includes waste from household collection rounds, bulky waste collection, hazardous household waste collection, garden waste collection, civic amenity site waste, and wastes collected though council recycling schemes.

HYDROGEOLOGY - The study of the movement of water through its associated rock strata.

INCINERATION - The controlled burning of waste, either to reduce its volume, or its toxicity. Energy recovery from incineration can be achieved by utilising the calorific value of paper, plastic, etc to produce heat or power. Current flue-gas emission standards are very high. Ash residues still tend to be disposed of to landfill.

INDUSTRIAL WASTE - Waste from any factory and from any premises occupied by an industry (excluding mines and quarries).

INERT WASTE - Waste which, when deposited into a waste disposal site, does not undergo any significant physical, chemical or biological transformations and which complies with the criteria set out in Annex 111 of the EC Directive on the Landfill of Waste.

INTEGRATED WASTE MANAGEMENT - Involves a number of key elements, including: recognising each step in the waste management process as part of a whole; involving all key players in the decision-making process; and utilising a mixture of waste management options within the locally determined sustainable waste management system. The Council integrated waste management contract with Herefordshire Council prescribes how the two Counties' Municipal Waste will be dealt with.

INTEGRATED POLLUTION PREVENTION AND CONTROL (IPPC) - Is designed to prevent or, where that is not possible, to reduce pollution from a range of industrial and other installations, including some waste management facilities, by means of integrated permitting processes based on the application of best available techniques.

KERBSIDE COLLECTION -- Any regular collection of recyclables from premises, including collections from commercial or industrial premises as well as from households. Excludes collection services delivered on demand.

LANDFILL - The deposit of waste onto and into land in such a way that pollution or harm to the environment is prevented and, through restoration, to provide land which may be used for another purpose.

LANDFILL ALLOWANCE TRADING SCHEME (LATS) - Process of apportionment, by local authority area, of the tonnage of biodegradable municipal waste that may be disposed of to landfill to meet EU Landfill Directive targets.

LANDFILL GAS - Gas generated by the breakdown of biodegradable waste under aerobic conditions within landfill sites. The gas consists primarily of methane and carbon dioxide. It is combustible and explosive in certain conditions.

LANDFILL TAX - A tax introduced in 1996 by HM Custom and Excise on waste deposited in licensed landfill sites, with the aim of encouraging more sustainable waste management methods and generating funds for local environmental projects. A revision to the landfill tax credit scheme in 2003 introduces the option of giving tax credits explicitly to biodiversity projects.

LANDRAISE - where the deposit of waste material above existing or original ground level raises land.

LANDSPREADING - The application of wastes or sludges to the land and thereby facilitating their degradation and incorporation into the top layer of soil. Fertiliser is usually added to assist aerobic breakdown.

LAND USE PLANNING - The Town and Country Planning system regulates the development and use of land in the public interest, and has an important role to play in achieving sustainable waste management.

LICENSED SITE - A waste disposal or processing facility that is licensed under the Environmental Protection Act for that function.

LOCAL DEVELOPMENT DOCUMENT (LDD) - A LDD will form part of the Local Development Framework and can either be a Development Plan Document (DPD) or a Supplementary Planning Document (SPD). Worcestershire County Council is responsible for producing a Minerals and Waste Development Framework containing Minerals and Waste Local Development Documents.

LOCAL DEVELOPMENT FRAMEWORK (LDF) - The LDF comprises a portfolio of local development documents that will provide the framework for delivering the spatial planning strategy for the area. District and Unitary Authorities will prepare LDFs for their area.

LOCAL DEVELOPMENT SCHEME (LDS) - The LDS sets out a three-year programme for the preparation of LDDs. As a County Planning Authority, Worcestershire County Council has prepared a Minerals and Waste Development Scheme, setting out a timetable for preparation of Minerals Development Documents and Waste Development Documents. Schemes must be submitted to the Secretary of State for approval and monitored annually through the AMR system.

MATERIALS RECOVERY /RECYCLING FACILITY (MRF) - A site where recyclable waste, usually collected via kerbside collections or from Household Recycling Centres, is mechanically or manually separated, baled and stored prior to reprocessing.

METHANE - A colourless, odourless gas formed during the anaerobic decomposition of putrescible waste. It is the major constituent of landfill gas.

MINERALS AND WASTE DEVELOPMENT SCHEME (M&WDS) - Essentially the same as the Local Development Schemes produced by the District and Unitary Authorities this three year project plan sets out the preparation milestones of the Minerals and Waste Development Framework. Again, the procedures for approving monitoring and reviewing the M&WDS involve dialogue with the Secretary of State.

MUNICIPAL WASTE - Includes all wastes collected by the Waste Collection Authorities, or their agents, such as all household waste, street litter, municipal parks and gardens waste, council office waste and some commercial and industrial wastes.

PLANNING INSPECTORATE (PINS) - The Government agency responsible for scheduling independent examinations. PINS employ the planning Inspectors who sit on independent examinations.

PLANNING POLICY GUIDANCE NOTES (PPGs) - Government policy statements on a variety of issues that are material considerations in determining planning applications.

PLANNING POLICY STATEMENT (PPS) - Guidance documents which set out national planning policy. They are being reviewed and updated and are replacing PPGs.

PREVIOUSLY DEVELOPED LAND - Previously developed land is that which is or was occupied by a permanent structure (excluding agricultural or forestry buildings), and associated fixed surface infrastructure. The definition covers the curtilage of the development. Previously developed land may occur in both built-up and rural settings. The definition includes defence buildings and land used for mineral extraction and waste disposal where provision for restoration has not been made through development control procedures.

PROPOSAL MAP - A separate Local Development Document, which illustrates on an Ordnance Survey base map all the policies and proposals contained in Waste Development Plan Documents and 'saved policies' (where applicable). It must be revised each time a new Development Plan Document is approved for adoption.

PUTRESCIBLE WASTE - Organic waste which, when deposited at a landfill site, will decompose and give rise to potentially polluting by-products in the form of liquids or gases.

PYROLYSIS - The heating of waste in a closed environment (i.e. in the absence of oxygen) to produce a secondary fuel product.

RESTORATION - The methods by which the land is returned to a condition suitable for an agreed after-use following the completion of tipping operations.

RECOVERY - The process of extracting a product of value from waste materials, including recycling, composting and energy recovery.

RECYCLED AGGREGATES - Aggregates produced from recycled construction waste such as crushed concrete, road planings etc.

RECYCLING -- Involves the reprocessing of wastes, either into the same product or a different one. Many non-hazardous industrial wastes such as paper, glass, cardboard, plastics and scrap metal can be recycled. Hazardous wastes such as solvents can also be recycled by specialist companies, or by in-house equipment.

REDUCTION - Achieving as much waste reduction as possible is a priority action. Reduction can be accomplished within a manufacturing process involving the review of production processes to optimise utilisation of raw (and secondary) materials and recirculation processes. It can be cost effective, both in terms of lower disposal costs, reduced demand from raw materials and energy costs. It can be carried out by householders through actions such as home composting, re-using products and buying goods with reduced packaging.

REFUSE DERIVED FUEL (RDF) - A fuel product recovered from the combustible fraction of waste, in either loose or pellet form.

REGIONAL PLANNING GUIDANCE (RPG) - Produced by the Government Office for the West Midlands (GOWM) on behalf of the Secretary of State. Until it is replaced by the new Regional Spatial Strategy (RSS) it provides a regional strategy within which Local Plans, Local Development Documents and the Local Transport Plan should be prepared.

REGIONAL SELF-SUFFICIENCY - Dealing with wastes within the region or country where they arise.

REGIONAL SPATIAL STRATEGY (RSS) - This document is prepared by the West Midlands Regional Assembly. It has statutory development plan status.

RE-USE - The reuse of materials in their original form, without any processing other than cleaning. Can be practised by the commercial sector with the use of products designed to be used a number of times, such as re-useable packaging. Householders can purchase products that use refillable containers, or re-use plastic bags. The processes contribute to sustainable development and can save raw materials, energy and transport costs.

SAVED PLAN & SAVED POLICIES - Under the Planning and Compulsory Purchase Act 2004 the County Structure and Minerals Local Plans have been 'saved' for a period of three years (To September 2007).

SCHEDULED ANCIENT MONUMENT (SAMs) - Nationally important archaeological remains that have special protection from development under the 1979 Ancient Monuments and Archaeological Areas Act.

SCOPING -The process of deciding the scope and level of detail of the SA and SEA. This also includes defining the environmental / sustainability effects and alternatives that need to be considered, the assessment methods to be used, the structure and contents of the Environmental / Sustainability Report.

SECONDARY AGGREGATES - Aggregates derived from by-products of the extractive industry, e.g. china clay waste, colliery spoil, blast furnace slag, pulverised fuel ash.

SPECIAL AREAS OF CONSERVATION (SAC) - Designation made under the Habitats Directive to ensure the restoration or maintenance of certain natural habitats and species some of which may be listed as 'priority' for protection at a favourable conservation status.

STAKEHOLDER - Anyone who is interested in, or may be affected by the planning proposals that are being considered.

STATEMENT OF COMMUNITY INVOLVEMENT (SCI) - Sets out the Council's vision and strategy for the standards to be achieved in involving the community and stakeholders in the preparation of all Local development Documents and in decisions on planning applications.

STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) - Local Planning Authorities must comply with European Union Directive 2001/42/EC which requires a high level, strategic assessment of local development documents (DPDs and, where appropriate SPDs) and other programmes (e.g. the Local Transport Plan and the Municipal Waste Management Strategy) that are likely to have significant effects on the environment.

STRUCTURE PLAN - A broad land use and transport strategy, which establishes the main principles and priorities for future development. Prepared by the County Council.

SUPPLEMENTARY PLANNING DOCUMENT (SPD) - Whilst not having 'development plan' status, SPDs can form in important part of the local development framework of an area. They can be used to expand policy or provide further detail to policies in development plan documents. Community involvement will be important in preparing SPDs but they will not be subject to independent examination.

SUSTAINABILITY APPRAISAL (SA) - Local Planning Authorities are bound by legislation to appraise the degree to which their plans and policies contribute to the achievement of sustainable development. The process of Sustainability Appraisal is similar to Strategic Environmental Assessment but is broader in context, examining the effects of plans and policies on a range of social, economic and environmental factors. To comply with Government policy, The County Council has undertaken Sustainability Appraisals that incorporate a Strategic Environmental Assessment of its Waste Core Strategy.

SUSTAINABLE DEVELOPMENT - Development, which is sustainable in that it meets the needs of the present without comprising the ability of future generations to meet their own needs.

SUSTAINABLE WASTE MANAGEMENT - Means using material resources efficiently, to cut down on the amount of waste we produce. And where waste is generated, dealing with it in a way that actively contributes to economic, social and environmental goals of sustainable development.

THE DEVELOPMENT PLAN -The Government is committed to ensuring that planning decisions on proposals for development or the change of use of land should not be arbitrary. The statutory development plan will continue to be the starting point in the consideration of planning applications (Section 38(6) of the Planning and Compulsory Purchase Act 2004). The development plan consists of:

(i) The Regional Spatial Strategy prepared by the West Midlands Regional Assembly ("the Regional Planning Body"); and

(ii) Development Plan Documents prepared by the District and Borough Councils, and the County Council.

VOID SPACE - The remaining capacity in active or committed landfill or landraise sites.

WASTE - Is the wide ranging term encompassing most unwanted materials and is defined by the Environmental Protection Act 1990 and decisions of the European Court. Waste includes any scrap metal, effluent or unwanted surplus substance or article that requires to be disposed of because it is broken, worn out, contaminated or otherwise spoiled.

WASTE ARISING - The amount of waste generated in a given locality over a given period of time.

WASTE HIERARCHY - Suggests that: the most effective environmental solution may often be to reduce the amount of waste generated - reduction. Where further reduction is not practicable, products and materials can sometimes be used again, either for the same or a different purpose - re-use. Failing that, value should be recovered from waste, through recycling, composting or energy recovery from waste. Only if none of the above offer an appropriate solution should waste be disposed.

WASTE MANAGEMENT INDUSTRY - The businesses (and not-for-profit organisations) involved in the collection, management and disposal of waste.

WASTE MANAGEMENT LICENCE - Waste Management Licensing - licenses are required by anyone who proposes to deposit, recover or dispose of controlled waste. The licensing system is separate from, but complementary to, the land use planning system. The purpose of a licence and the conditions attached to it is to ensure that the waste operation that it authorises is carried out in a way that protects the environment and human health.

WASTE MINIMISATION - Reducing the volume of waste that is produced.

WEST MIDLANDS REGIONAL ASSEMBLY (WMRA) - Body responsible for regional planning and waste strategy matters in the West Midlands.

WEST MIDLANDS REGIONAL TECHNICAL ADVISORY BODY (WMRTAB) - Supports and advises on waste management options and strategies. Also develops regional targets and objectives for waste management.

Addendum

This document was approved by the Council`s Cabinet on 2nd November 2009 for public consultation.

Since that date the following errors have been identified, please amend the document accordingly:

Page 50 - Lypett Grange should be Lyppard Grange

Severn Estuary should be SCI not SAC

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