

# MINERALS & WASTE DEVELOPMENT FRAMEWORK

# Waste Core Strategy

# including Development Management Policies



March 2011

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### **Chapter 1: Introduction**

#### About this document

- 1.1 This document contains the waste planning policy for Suffolk and draws together the outcome of previous issues and options consultations in respect of policies and sites and takes into account the comments made. Proposals are made for sites suitable for the development of Strategic Residual Waste Treatment Facilities and Non Hazardous Landfill. Planning applications for other types of waste development are intended to be determined in accordance with the policies contained within this document and that of other relevant documents of the Development Plan including the East of England Plan.
- 1.2 Chapters 2 and 3 of this document set out the Vision, Aims and Objectives that seek to promote an overall strategy of sustainable waste management.
- 1.3 Chapter 4 describes the implementation and monitoring of the Waste Core Strategy.
- 1.4 Chapter 5 sets out the spatial potrait for waste management within Suffolk.
- 1.5 Chapter 6 describes the provision to be made for waste management facilities in the light of the sub-regional apportionment and other sources of information.
- 1.6 Chapter 7 contains policies that would be used in the determination of planning applications for waste development.
- 1.7 Chapter 8 identifies four specific sites or areas of search for Strategic Residual Waste Treatment Facilities, i.e. sites capable of handling 100,000 tonnes per annum or more of residual waste that is left after recyclable and compostable materials have been removed. The Waste Core Strategy is technology neutral, although there are two commonly found forms of residual waste treatment. Energy from Waste which is also known as EfW (incineration with electricity generation and use of the waste heat in buildings) and Mechanical and Biological Treatment which is also known as MBT (mechanical separation of recyclable materials followed by composting of the remaining material to produce a fuel or stabilised

waste for landfilling). This does not preclude however other forms of treatment that may be proposed.

- 1.8 Chapter 9 identifies four specific sites for Strategic Non Hazardous Landfill. Three of the four sites are already non-hazardous landfills and these proposals involve additional or alternative void capacity or a widening of the types of waste that may be disposed of. The remaining site is a former mineral working, where landfilling would provide a means of restoring the site.
- 1.9 The Key Diagram and Appendices contain important information that underpins the rest of the document including a map and schedule of existing facilities and site selection criteria.
- 1.10 The remainder of this Chapter explains the relationship to other relevant documents of the Minerals & Waste Development Framework.

#### The Local Development Framework System

1.11 Suffolk County Council has responsibility for producing a Minerals and Waste Development Framework (M&WDF). In undertaking the M&WDF, the County Council has to prepare the following constituent documents:

#### Minerals and Waste Development Scheme (the Scheme).

1.12 This is the project plan and timetable for preparing the Minerals and Waste Development Plan Documents. The latest version reflects that no proposals for non-strategic waste management facilities were put forward in response to repeated calls for sites made by the County Counci. In the absence of such proposals from industry it is not considered practical to try and identify specifically where future non strategic facilities should be located. Planning applications for such proposals coming forward in the future will be determined with reference to the generic Development Management policies contained within the Waste Core Strategy.

#### Statement of Community Involvement (SCI).

1.13 The adopted SCI explains how the County Council intends to engage all "stakeholders" (e.g. local communities, industry groups, other Local Authorities, Environment Agency etc) in the production of the Development Plan Documents and to encourage continuing public participation.

#### A series of detailed Minerals and Waste Development Plan Documents (DPD).

1.14 Besides the Waste Core Strategy, the County Council has already prepared and adopted a Minerals Core Strategy DPD in September 2008 and a Minerals Specific Site Allocations DPD in September 2009.

#### Annual Monitoring Report. (AMR)

1.15 This covers the financial year (e.g. 1st April to 31st March) and is published in the December of each year.

#### Sustainability Appraisal

1.16 The Waste Core Strategy has been the subject of a Sustainability Appraisal (SA) incorporating the requirements of the Strategic Environmental Assessment (SEA) Directive and a SA report is available. Overall the SA concluded that there were no very negative effects in respect of the vision, aims, objectives, policies and proposals contained within the Waste Core Strategy. The SA process is an iterative process and has been repeated at each stage of the process and has been taken into account in the formulation of the Waste Core Strategy.

### Waste Core Strategy DPD – Progress to date

1.17 Consultation on the Waste Issues Report took place between 29 October and 24 December 2007 and sought views on a number of issues and posed a range of questions. Also consulted upon at this time was the Waste Sustainability Appraisal Scoping Report. This document outlined the baseline information and evidence needed to inform the Sustainability Appraisal of the emerging Core Policies and Development Management Policies and the sites that would come forward.

- 1.18 A Waste Issues and Options document published in August 2008 set out a number of policy options. The consultation period ran from 11 August to 10 October 2008. Accompanying it was a Waste Issues and Options Sustainability Appraisal document. In addition to comments relating to the policy options, a number of potential sites for Residual Waste Treatment Facilities and Non Hazardous Landfill were submitted by prospective developers for consideration.
- 1.19 The Waste Core Strategy Issues and Options (Part II) Strategic Sites document published in December 2008 identified sites for strategic Residual Waste Treatment Facilities and Non Hazardous Landfill. The consultation period ran from 8 December 2008 to 13 February 2009. Accompanying that document was the Waste Core Strategy Issues and Options (Part II) Strategic Sites Sustainability Appraisal document. A significant number of representations were made objecting to some of the proposed sites.
- 1.20 A Final Consultation document was subject to public consultation between 27 July and 9 October 2009. A large number of consultation responses were received objecting in particular to one of the proposed sites for a strategic residual waste treatment facility in the parishes of Stanton and Hepworth. Following consideration of the representations made and the likely demand for sites, it was recommended that this site not be included in the Submission document.
- 1.21 The Submission document was approved by County Council in December 2009.

#### **Other Policy Documents**

- 1.22 The preparation of this Plan has taken account of a number of other policy documents. These include:
  - The Waste Strategy for England 2007 (including the waste hierarchy of prevention, re-use, recycle/compost, energy recovery and finally disposal);
  - the Suffolk Joint Municipal Waste Management Strategy,
  - the East of England Plan that was approved by Government in May 2008 and replaces the Structure Plans within the Region including the Suffolk Structure Plan;
  - present and emerging DPDs of the District Councils in and adjoining Suffolk, so far as they may impact upon waste management matters (especially in respect of land identified for B2 and B8 use); and,

- the waste DPDs of adjoining Waste Planning Authorities; and,
- Environmental Permitting Regulations.

#### Saved waste policies that will be replaced

1.23 Upon the adoption of the Waste Core Strategy the existing saved policies and proposals of the Suffolk Waste Local Plan, adopted in February 2006, will be replaced. This includes all of the policies and proposals of the Waste Local Plan with the exception of WLP1 and WLP3 which have not been saved. A full list is included in Appendix 6.

#### Local Strategic Partnerships

1.24 Government guidance in Planning Policy Statement 12 (PPS12) Creating strong safe and prosperous communities through Local Spatial Planning makes clear the importance of linking Community Strategies with Local Development Frameworks, thus ensuring a more integrated approach towards future development in the District/County. Local Development Frameworks are recognised as a delivery mechanism for community strategies. The priorities of the Community Strategies in Suffolk have been where appropriate also referred to in the Vision, Aims and Objectives, Policies of Waste Core and the Strategy.

# **Chapter 2: Vision**

#### Our Vision for Waste Planning

2.1 The following vision has been developed within the context of national and regional waste planning policy together with local considerations. PPS12 indicates that Development Plan Documents should plan for a period of least 15 years which translates into an end date of 2026.

"By 2026, the landfilling of untreated municipal, commercial & industrial wastes will have ceased and residual waste management processes will be fully operational, recovering value from wastes that cannot practicably be recycled or composted.

Waste management activities in Suffolk will be located sensitively and appropriately, and operated to high standards, so that they do not harm the environment or endanger human health or impact disproportionately on local amenity and tranquillity. Former temporary waste management activities, such as landfill sites, will have been restored to a quality and to a state conducive to appropriate after-uses such as agriculture and improving the habitats for biodiversity; in particular habitats and species identified in the Suffolk Biodiversity Action Plans, and where appropriate geodiversity".

# **Chapter 3: Aims and Objectives**

3.1 Flowing from the Vision are the following 6 aims and 11 objectives that also reflect national and regional waste policy together with local considerations. The policies and proposals contained within the Waste Core Strategy have in turn been developed within the context of these aims and objectives.

# <u>Aim 1</u> To manage that volume of waste identified in the East of England Plan as being apportioned to Suffolk.

Objective 1: To provide policies and identify locations for the management of the quantities of waste apportioned to Suffolk through the East of England Plan.

In defining this objective, it is recognised that there will continue to be cross boundary movements of waste but total imports and exports will be approximately equal.

# <u>Aim 2</u> To promote and encourage sustainable practices in the transportation and management of wastes.

Objective 2: To facilitate sustainable waste management by minimising waste as a priority and encouraging communities to take responsibility for the waste they produce through better education via public consultation.

The thorough public consultation process that is undertaken as part of the plan making process also serves to inform the public of waste management issues including the waste hierarchy.

Objective 3: To facilitate the efficient transportation of waste throughout Suffolk.

Opportunities for rail and water based transportation have been assessed in respect of the location of residual waste treatment facilities. The transport of waste by road is assessed against the potential access to the Suffolk Lorry Route Network and the potential sources of waste.

Objective 4: To facilitate the driving of waste up the hierarchy through the provision of sufficient suitable waste management facilities for waste recycling, composting and transfer.

In encouraging the treatment of waste as far as possible up the waste hierarchy, criteria based policies are included in respect of facilities for the recycling, composting and transfer of waste and allow for good distribution across the County.

#### <u>Aim 3</u> To contribute to social and economic well-being.

Objective 5: To facilitate equality of public access to Household Waste Recycling Centres.

A criteria-based policy is included in respect of proposals for Household Waste Recycling Centres.

# <u>Aim 4</u> To protect against adverse impacts on human well-being and to ensure waste management facilities do not endanger human health.

Objective 6: To encourage waste management facilities and practices that do not endanger human health and to ensure that adverse impacts on residential amenity and the quality of life can be prevented or suitably mitigated.

A general criteria-based policy, that would be applicable to all waste development, is included in the Waste Core Strategy and is intended to ensure adequate protection.

Objective 7: To minimise adverse impacts on air quality.

A general criteria-based policy, that would be applicable to all waste development, is included in the Waste Core Strategy and is intended to ensure adequate protection.

#### <u>Aim 5</u> To protect and enhance the built, natural and historic environment.

Objective 8: To minimise adverse impacts on landscape quality and the built and historic environment.

A general criteria-based policy, that would be applicable to all waste development, is included in the Waste Core Strategy and is intended to ensure adequate protection.

Objective 9: To minimise adverse ecological and geological/geomorphological impacts, and to encourage opportunities for restoration, creation and enhancement of wildlife habitats.

A general criteria-based policy, that would be applicable to all waste development, is included in the Waste Core Strategy and is intended to ensure adequate protection.

Objective 10: To minimise adverse impacts on water quality.

A general criteria-based policy, that would be applicable to all waste development, is included in the Waste Core Strategy and is intended to ensure adequate protection.

### <u>Aim 6</u> To assist in reducing the impacts of climate change upon the environment.

Objective 11: To facilitate proposals and encourage waste management practices that reduce the effects of the emissions of greenhouse gases and deliver renewable energy production where feasible and appropriate appropriate and mitigate against the impacts of climate change.

A criteria-based policy is included in respect of climate change and policies in respect of residual waste treatment facilities and non-hazardous landfill to encourage energy recovery.

### **Chapter 4: Implementation and Monitoring**

#### **Implementation**

4.1 The implementation of the Waste Core Strategy will be achieved primarily through the determination of individual planning applications for a range of Waste Management Facilities. The County Council will seek to work closely with local stakeholders and the waste industry, to provide appropriate advice, prior to the submission of any application. The intent will be to ensure that development delivers the objectives of the Waste Core Strategy. This is achieved by reference to the policies and proposals contained in the Waste Core Strategy during the determination of the planning application and by the imposition of planning conditions and where necessary legal agreements as part of the planning permission.

#### Monitoring

- 4.2 Monitoring the Waste Core Strategy is achieved via the Annual Monitoring Report. The AMR relates to the 12-month period from 1st April to 31st March and provides the means for assessing policies and performance and for reviewing progress on the Development Plan. Any changes in Government policy relevant to waste development, waste management or apportionment would similarly be expected to be addressed through the AMR.
- 4.3 The AMR monitoring process will include the following issues:
  - i) The quantities of waste managed at a range of Waste Management Facilities throughout the County;
  - ii) Void space at non hazardous and inert landfill sites;
  - iii) The numbers of planning applications for new Waste Management Facilities and the decisions taken on them;
  - iv) The effectiveness of Development Plan policies in relation to decisions taken on planning applications;

- 4.4 This will assist in monitoring actual performance against regionally agreed targets and assessing progress on the development needs for strategic sites identified in the Plan. Details are outlined in Appendix 5.
- 4.5 Observations recorded in the AMR will ultimately feed into the review of the Waste Core Strategy that is intended to take place on a five year rolling basis or sooner if indicated by the AMR or by some other reasons such as legislative change. The AMR is discussed with other stakeholders at the Waste Liaison Group which includes representatives of interest groups, statutory bodies and the industry.

# **Chapter 5: Spatial Portrait**

#### **Spatial Portrait**

5.1 The development of the vision, aims and objectives into policies and proposals must take into account spatial considerations. The following Chapter sets out a spatial portrait of Suffolk with reference to the social, economic and environmental character of the county. Reference is then made to waste management within the wider East of England Region. Finally, all these aspects are drawn together within a spatial policy for the management of waste within Suffolk.

#### Social Issues

#### Population

- 5.2 Suffolk has an estimated population of 702,000 (2006 figure). Around one-third of the total population lives in the county's three major towns (Ipswich, Lowestoft and Bury St Edmunds), another third lives in smaller market towns and the remaining third lives in rural areas. The average population density is relatively low at 182 people per km<sup>2</sup> (compared to the average for England of 387 per km<sup>2</sup>), reflecting the rural nature of the county.
- 5.3 It is predicted the population of Suffolk will grow by between 9% and 13% by 2021. In particular, the Haven Gateway area (which includes Felixstowe, Ipswich and the surrounding area) is expected to experience significant housing and employment growth.

#### Housing

5.4 In April 2006, Suffolk had a total housing stock of 311,000, with an average annual increase in recent years of about 2,700. However, the East of England Plan indicates that Suffolk should make provision for a minimum of an additional 48,070 dwellings by 2021, an annual average increase of 3,200.

#### Economic Issues

#### Employment

5.5 2005 figures show that the largest employment sectors in the county are health and social work (11.3%), retail trade (10.2%) and education (7.8%). It is estimated that approximately 1,100 people work in the waste industry sector in Suffolk.

#### Environmental Issues

#### **Climatic Factors**

5.6 There is an overwhelming body of scientific evidence highlighting the serious and urgent nature of climate change. Suffolk is vulnerable to the implications of climate change because of areas that are vulnerable to coastal and river flooding and because of the lower than average rainfall compared to the rest of the UK, that increases pressure upon water resources to supply irrigation, industry and population.

#### Air quality

5.7 Air quality is generally good in Suffolk. However, four Air Quality Management Areas have recently (2007) been designated in the county. Three of the sites are in Ipswich and the fourth is in Woodbridge. These localised air quality problems are due mainly to vehicle congestion hot-spots in the county.

#### Water quality and resources

5.8 Water quality is generally high in Suffolk. However, there remain some sites where water quality is poor and needs improving, and the most recent available results (for 2005) showed an overall decline in the chemical water quality in Suffolk's rivers. This is partly due to an update and stricter monitoring classification under the Waste Framework Directive.

#### Soil and agriculture

5.9 Suffolk is rich in agricultural farmland. About 1% of the county's soils are Grade 1, with grades 2 and 3a each at about 20%; in total, about 45% of the county's soils are classed as "best and most versatile".

#### Traffic and transport

- 5.10 The dispersed nature of Suffolk's rural population combined with a lack of services and regular scheduled public transport in rural areas is unlikely to lead to decreased demand for private travel in the near future.
- 5.11 The Port of Felixstowe, the largest container port in the country, contributes significantly to HGV traffic in Suffolk, particularly on the A14. The approved port expansion there, along with the approved port at Bathside Bay in Harwich, Essex, will lead to an increase in HGV traffic in the future.
- 5.12 Almost all waste within Suffolk is transported by road (except for some nuclear waste transported by rail from Sizewell). However, the Suffolk highway network management hierarchy seeks to direct lorry traffic towards designated routes and thereby minimise conflict between environmental protection and economic development.

#### Energy

- 5.13 Suffolk was responsible in 2004 for the consumption of approximately 10.5 GWh of energy through domestic and industrial energy use. This resulted in the release of around 4 million tonnes of carbon dioxide.
- 5.14 There are a number of landfill gas powered electricity generation schemes in operation in the County and other renewable energy schemes include the opening of the county's first commercial wind turbine ("Guliver") at Ness Point, Lowestoft. Planning permission for a windfarm at Parham, in Suffolk Coastal district, was granted in July 2006, although it has not been implemented. A number of other potential onshore and offshore wind schemes are in the pipeline including one in the Greater Gabbard area.

#### Flood Risk

5.15 Environment Agency information suggests that around 12,000 properties in Suffolk are at risk of flooding from rivers or the sea (*figure excludes Forest Heath*).

#### Biodiversity and geodiversity

5.16 Suffolk contains a range of sites with ecological designations, including six Ramsar sites, seven Special Protection Areas, eight Special Areas of Conservation, 283 Sites of Special Scientific Interest (of which 36 are geological) and 25 Local Nature Reserves. The number of County Wildlife Sites currently stands at about 850 (2007)and the countv has seven Regionally Important Geological/Geomorphological Sites (RIGS) and 105 candidate RIGS. In addition, a number of Biodiversity Action Plans and Habitat Action Plans are in place, with the aim of conserving and increasing nationally and locally important habitats and species in the county. Assessment of potential impacts of waste development must include consideration of similar areas beyond the County boundary.

#### Archaeology & historic environment

- 5.17 The County's Historic Environment Record (HER) currently (2006) has 24,484 records relating to 16,814 archaeological sites. Of these, 328 are designated as Scheduled Monuments of national importance. The county also contains many buildings of historical or architectural interest, with 16,650 listed buildings and 170 Conservation Areas recorded in 2004/5. The numbers of recorded archaeological sites, listed buildings and conservation areas have all increased in recent years, giving increased protection to Suffolk's heritage. The area of designated historic parkland has also increased in the last five years.
- 5.18 Suffolk's historic landscape makes an outstanding contribution to the County's character and local distinctiveness. A high percentage of the county is deemed to be 'ancient countryside' where the pattern of fields and roads is of medieval or earlier origin. Historic features are a finite resource and cannot be fully replicated. The Historic Landscape Characterisation (HLC) produced by the County's

Archaeological Service in conjunction with English Heritage is a key resource for the understanding of the historic landscape.

#### Landscapes and townscapes

- 5.19 Around 12% of Suffolk's landscape is designated as an Area of Outstanding Natural Beauty (AONB). Suffolk's two AONBs are the Suffolk Coast & Heaths and the Dedham Vale. Straddling the Norfolk and Suffolk border, the Broads is Britain's largest nationally protected wetland the whole area is 303 sq km. Its rivers, broads (shallow lakes), marshes and fens make it a unique area, rich in rare habitats, which support myriad plants and animals.
- 5.20 Reports produced by the Campaign to Protect Rural England indicates that light pollution increased in the county between 1993 and 2000. Overall levels of pollution are below the national average, however, and Suffolk does contain proportionally lower areas in the darkest category than for England as a whole.

#### Rights of Way

5.21 The Rights of Way network in Suffolk totals 5,400 km so that it is not unusual for development proposals within the County to be directly or indirectly affected by rights of way. Potential conflicts are usually mitigated by diversions.

#### Minerals

5.22 Historically, some exhausted mineral quarries have been used as landfill sites, accepting either inert or municipal/commercial & industrial waste. However, the Environment Agency has identified through their groundwater policy that there are widespread constraints upon new non-inert landfill space within the County due to much of Suffolk being overlain by Groundwater Source Protection Zones. This means that in future mineral sites may only be used to landfill municipal/C&I wastes provided they are located within a less vulnerable area and they have been subject to a satisfactory quantitative risk assessment to describe the presence of a natural geological boundary.

Waste

- 5.23 Suffolk has a widespread network of waste management facilities. This includes 7 non-hazardous landfills, 11 inert only landfills, 8 incinerators, 7 composting plants, 18 household waste recycling centres, 2 materials recycling facilities, 26 waste transfer facilities, 20 aggregates recycling facilities, 24 metal and end of life vehicles facilities and 25 main waste water treatment works.
- 5.24 The mix of different types of waste management facilities is set to change as levels of recycling, composting, and recovery increase at the expense of landfill in line with the National Waste Strategy.
- 5.25 The distribution of waste management facilities can be seen by reference to the Map of Waste Management Facilities in Suffolk and within 5km of Boundary (see Appendix 1). The influence of centres of population and major highway routes is clearly visible. In addition, there are also a number of former military airfields, which have since become designated industrial areas and are also used for waste management.

#### **Regional Issues**

- 5.26 The sub-regional apportionment, based upon county boundaries, for Municipal Solid Waste, Commercial & Industrial Waste, and imported waste from London is provided within the East of England Plan. This includes targets for recycling, composting and recovery and limitations on the landfilling of London Waste after 2015 and the building of new non-landfill facilities handling waste from primarily outside of the region. There is currently no sub-regional apportionment for other wastes including Hazardous Waste, Inert Waste, Radioactive Waste or Agricultural Waste.
- 5.27 The counties that make up the East of England region, namely Norfolk, Suffolk, Essex (including Thurrock and Southend unitary authorities), Cambridgeshire (including the Peterborough unitary authority area), Bedfordshire (now represented by Bedfordshire Borough Council and Central Bedfordshire unitary authorities) and Hertfordshire, are all engaged in producing Waste Development Frameworks. These frameworks will all make provision in accordance with the guidance provided

within the East of England Plan. Sub-regional apportionment itself is designed to take account of a number of factors such as projected economic growth levels and national waste policy in terms of targets for recycling etc. Although sub-regional apportionment allows for the cross county boundary movement of waste, the provision to be made in the Waste Development Frameworks should be equal to that which is arising within the county itself.

## **Chapter 6: Waste Planning Strategy**

#### **Spatial Policy**

- 6.1 The following spatial policy, in conjunction with the Key Diagram (which illustrates potential opportunities and constraints) and the development management policies, seeks to address the issues highlighted in the preceding chapter, as summarised below.
- 6.2 In terms of social issues the population and the number of households is set to rise. In respect of economic issues, employment opportunities will fluctuate although the general trend will be upwards as the population increases leading to an increase in the amount of waste to be managed.
- 6.3 Environmental concerns dictate that the nature of waste management is expected to change in line with the National Waste Strategy, with increased emphasis upon recycling, composting and recovery at the expense of landfilling which will also be constrained by groundwater protection policy. Within Suffolk there are also a variety of environmental constraints which need to be considered in terms of both their local and in some cases global implications.
- 6.4 Opportunities to locate facilities close to the sources of waste and along the best highway routes available within the County are preferred. Some former military sites may also provide opportunities to locate waste management facilities relatively remotely from sensitive receptors such as residential properties. In many cases these are already allocated for General Industrial uses in Development Plans or have planning permission for such use.

#### Policy WCS1 The Spatial Waste Planning Strategy for Suffolk

Preference will be given to proposals for waste management facilities in accordance with the Key Diagram where individual sites are well related to the Suffolk Lorry Route Network, centres of population and sources of waste and do not have adverse impacts upon features of environmental importance or endanger human health.

#### **Quantity of Waste Arising and Managed in Suffolk**

- 6.5 An important waste planning consideration is the amount and type of waste arisings that it is estimated will be required to be managed during the plan period.
- 6.6 This Chapter considers wastes that are subject to sub-regional apportionment i.e. Municipal Solid Waste, Commercial & Industrial Waste and London Waste, as well as those that are currently not the subject of sub-regional apportionment i.e. Hazardous Waste, Inert Waste, Radioactive Waste, and Agricultural Waste. The following tables are based upon information contained within the Suffolk County Council Minerals and Waste Development Framework Annual Monitoring Report for 2008/9. Table 1 indicates the current total reliance on landfill for the disposal of residual Household Waste and the significant rate of recycling, including composting, that is already carried out (arisings include some household waste arising from Authorities outside Suffolk).

Table 1: Household Waste Arising and Managed within Suffolk (tonnes)						
	2006/7	2007/8	2008/9			
Arisings	474,993	412,471	407,563			
Landfilled in Suffolk	219,764	198,883	189,582			
Waste recycled	225,023	168,432	217,981			

Source: Table W1 Suffolk County Council Minerals and Waste Development Framework Annual Monitoring Review for 2008/9.

Approximately 33,400 tonnes of Commercial & Industrial Waste collected by local authorities within Suffolk should be added to the household waste to determine Municipal Solid Waste arisings.

6.7 Table 2 indicates that the volume of Commercial & Industrial Waste arising is significantly greater than the volume of Municipal Solid Waste arising. A large volume of this Commercial & Industrial is disposed of to landfill. The recycling rate for Commercial & Industrial Waste is apparently lower than for Municipal Waste although the figures do not take account of non-surveyed waste such as paper sent directly to recyclers. The figures indicate a significant level of recovery, via small-scale incineration.

# Table 2: Commercial & Industrial and Other Waste Arising and Managed within Suffolk (tonnes)\*

	2006/7	2007/8	2008/9
Arisings	616,330	699,155	1,053,029
Suffolk incineration	130,790	130,087	129,665
(recovery)			
Landfilled in Suffolk	293,768	288,190	418,267
Waste recycling	160,767	195,878	289,998

Source: Table W3 Suffolk County Council Minerals and Waste Development Framework Annual Monitoring Review for 2008/9.

6.8 Table 3 indicates that a significant volume of inert waste is landfilled within Non-Hazardous Landfill sites alongside Municipal Solid Waste and other Commercial & Industrial Wastes. It is also apparent from Table 3 that Non-Hazardous Landfill Capacity will be used up within the next 9 years at current rates of infilling unless there is new permitted void space.

Table 3: Waste Inputs into Non-hazardous Landfills within Suffolk (tonnes)								
2006/7 2007/8 2008								
Non-hazardous voidspace cu m	8,861,296	7,630,736	7,585,409					
Voidspace less 20% for lining, cap and cover	7,089,037	No longer deducted	No longer deducted					
Household Waste tonnes landfilled	219,764	198,883	189,582					
Commercial & Industrial Wastes tonnes landfilled	293,763	255,386	418,267					
Inert Wastes tonnes landfilled	293,444	365,171	401,229					
Total landfilled with Non-hazardous Landfill cu m	806,971	819,440	1,009,078					

At average rate of fill for previous 3 years (878,496) and using void space figures provided by industry at year end (March) void space will reach zero in 2016/17; i.e. 7,585,409/878,496 = 8.6 years.

Source: Table W4 Suffolk County Council Minerals and Waste Development Framework Annual Monitoring Review for 2007/8.

6.9 Table 4 indicates that a considerable amount of inert waste is deposited in inert only landfills and that currently permitted inert only landfill capacity is projected to run out within 23 years at current rates of infilling.

Table 4: Waste Inputs into Inert Landfills within Suffolk (tonnes)							
2006/7 2007/8							
Inert void space cu m	3,176,086	2,929,830	2,830,752				
Less 5% restoration allowance	3,017,282	2,783,339	2,689,214				
Inert Waste landfilled within inert only sites	131,181	279,795	126,978				
Inert Waste landfilled cu m @ 1.5t/cu m	87,451	186,530	87,985				
Remaining void space	2,929,830	2,830,752	2,742,767				

At average rate of fill for the previous 3 years (120,655 cu m) the remaining void space (2,830,752 cu m) would reach zero by 2032; i.e. 2,742,767/120,655 = 22.7 years.

Source: Table W5 Suffolk County Council Minerals and Waste Development Framework Annual Monitoring Review for 2007/8.

#### Forecasts for the likely arisings for key dates during the plan period

- 6.10 The Secretary of State approved the East of England Plan in May 2008 and it forms part of the Development Plan. The Waste Core Strategy must be in conformity with it.
- 6.11 In discussing the role of the Regional Spatial Strategy (that in Suffolk's case is represented by the East of England Plan) Paragraph 13 of Planning Policy Statement 10: Planning for Sustainable Waste Management, states that:

"The strategy for waste management confirmed by the Secretary of State following public examination should be carried forward into local development documents and will inform the preparation and review of municipal waste management strategies. In preparing local development documents, there should no need to reopen consideration of either its principles or the annual rates of waste to be managed."

6.12 However, it is still considered useful to review below the sub-regional apportionment as set out in the East of England Plan against the monitored levels of waste based on the data presented in the Annual Monitoring Report (AMR). It is apparent that the 2008/9 AMR figures are closer to sub-regional apportionment

figures than in previous years and this is considered at least partly to be due to assumptions being made about waste management sites based on previous years throughput where survey forms have not been returned, as opposed to making no allowance i.e. there may have been undercounting in previous years AMR surveys. Although policy WM4 within the East of England Plan is based upon management of particular levels of waste at certain key dates a fuller picture of the waste forecast are provided by appendix C of that document, as reproduced in Table 5 below.

Table 5: Forecasts of Waste to be Managed (thousand tonnes)								
Financial year	05/06	06/07	07/08	08/09	09/10	10/11		
Municipal Solid Waste	418	434	450	466	483	501		
Commercial & Industrial Waste	1011	1037	1063	1089	1117	1149		
London Waste	332	310	287	264	242	220		
Total	1761	1781	1800	1819	1842	1870		

	Continued								
11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
505	509	512	516	519	523	527	530	534	538
1181	1213	1245	1276	1320	1364	1408	1452	1496	1538
197	174	1 52	129	107	106	106	106	106	106
1883	1896	1909	1921	1946	1993	2041	2088	2136	2182

Source: Appendix C of the East of England Plan

#### Municipal Solid Waste

6.13 Appendix C of the East of England Plan indicates that Suffolk should plan annually to manage for between 418,000 tonnes in 2005/6 rising to 538,000 tonnes in 2020/21 of Municipal Solid Waste. 6.14 The projected figure for managing Municipal Solid Waste in 2008/9 is 466,000 tonnes which is 25,037 (6 percent) more than recorded within the Annual Monitoring Report for that year. Similarly the projected figure for 2007/8 was 450,000 tonnes which is 4,129 (less than 1 percent) more than recorded within the Annual Monitoring Report for that year, and the projected figure for 2006/7 was 434,000 tonnes which is 74,393 (15 percent) more than recorded within the Annual Monitoring Report for that year.

#### Commercial & Industrial Waste

- 6.15 Appendix C of the East of England Plan indicates that Suffolk should plan annually to manage for between 1,011,000 tonnes in 2005/6 rising to 1,538,000 tonnes in 2020/21 of Commercial & industrial Waste.
- 6.16 The projected figure for 2008/9 was 1,089,000 tonnes which is 35,971 (3 percent) more than recorded within the Annual Monitoring Report for that year. Similarly the projected figure for 2007/8 was 1,063,000 tonnes which is 363,845 (52 percent) more than recorded within the Annual Monitoring Report for that year, and the projected figure for 2006/7 was 1,037,000 tonnes which is 420,670 (68 percent) more than recorded within the Annual Monitoring Report for that year.
- 6.17 The 2008/9 AMR includes 208,733 tonnes of Commercial & Industrial Waste arising from outside Suffolk, but excludes some recyclable waste sent directly for recycling or processing. This is estimated at 80,000 tonnes per annum.

#### London Waste

- 6.18 Appendix C of the East of England Plan indicates that Suffolk should plan annually to manage a volume of London waste of 332,000 tonnes in 2005/6 reducing to 106,000 tonnes in 2016/17 and thereafter until 2021.
- 6.19 There has been no recorded landfilling of London waste in Suffolk over the period 2006/7 to 2008/9.

6.20 After 2015 provision for the management of imported waste from London is to be restricted by Policy WM3 of the East of England Plan to the landfill of residual waste that has been subject to the maximum practical level of recovery and treatment, for which landfill is the only practicable option.

#### Hazardous Waste

- 6.21 The East of England Plan makes no sub-regional apportionment for Hazardous Waste which includes the following groups:
  - construction and demolition waste, including asbestos and contaminated soils, and treated wood;
  - oily wastes, batteries and accumulators, and end of life vehicles;
  - chemical processing wastes, and marine wastes;
  - waste water treatment and water industry wastes;
  - waste electrical and electronic equipment, including TVs and fluorescent tubes.
- 6.22 There are currently no hazardous landfill sites in Suffolk although some specified existing non-hazardous landfill sites are licensed to accept asbestos in specially designated and designed cells. All other hazardous wastes are taken to sites outside the County for treatment or disposal.
- 6.23 As part of the review of the East of England Plan, a Regional Hazardous Waste Strategy is to be formulated, although until the revised regional guidance is adopted no new site-specific provision is to be made within the Waste Core Strategy for Hazardous Waste. Planning applications for the transfer, storage, processing and treatment of hazardous waste will be considered by reference to Policy WDM16 of the Waste Core Strategy, which allows for the location of such facilities on land designated in Development Plans for General Industrial (B2) and Storage and Distribution (B8) uses, or within the establishment where much of the waste is produced.

#### Inert Waste

- 6.24 The East of England Plan makes no sub-regional apportionment for Inert Waste.
- 6.25 Tables 3 and 4 above however indicate that considerable amounts of inert wastes are arising and are managed within Suffolk. Table 3 indicates that the average annual amount of inert waste being landfilled into Non-hazardous sites over the last three years is 353,281 tonnes (353,281 cu m). Table 4 indicates that the average annual amount of inert waste being landfilled into inert only sites over the last three years is 120,655 tonnes (87,985 cu m).
- 6.26 Table 3 also indicates that permitted Non-hazardous Landfill capacity is projected to be full at current rates of infilling by 2016/17. It is the intention to restrict by planning conditions placed on new planning permissions for Non-hazardous Landfill the amount of Inert Waste, to that required for engineering purposes primarily for daily cover of the waste and capping of the restored landfill site. A ratio of 20% inert waste to 80% Non-hazardous waste is suggested. Table 4 indicates that permitted Inert Waste only landfill capacity is projected to be full at current rates of infilling by 2032. This does not however include any allowance for permitted void space at sites such as Wetherden and Tattingstone where minerals are still to be extracted.

#### Radioactive Waste

- 6.27 The East of England Plan makes no sub-regional apportionment for Radioactive Waste.
- 6.28 The largest sources of Radioactive Waste within the County are Sizewell A and B Power Stations. This includes decommissioning waste from Sizewell A. Some waste is dealt with on site in purpose built incinerators. Other waste is transported to the specialist facility near Drigg in Cumbria.

- 6.29 Policies WDM14 and WDM15 are intended for use in connection with any additional proposals for the management of Very Low Level, Low Level and Intermediate Level Radioactive Wastes and spent fuel within the Sizewell A and B sites.
- 6.30 British Energy has indicated that it needs to construct a new dry store to house containers containing spent fuel. The required capacity would be to house up to 3,500 individual fuel assemblies in up to 200 containers. This would require a building of about 5500 square metres. British Energy proposes to submit an application for this building and a replacement car park under the provisions of the Electricity Act in 2010.
- 6.31 The volume of radioactive waste that will arise from the decommissioning of the Sizewell A station during the Core Strategy period is less certain as this depends on available funding, the timetable for decommissioning, the amount of waste that might be recycled and the characterisation of various potential waste streams.
- 6.32 The site operator has estimated that the volume of LLW arising up to 2032 is about 4000 cubic metres, some of which may be reclassified as VLLW and some of which may be considered to be non radioactive after further characterisation.
- 6.33 It is also estimated that around 1670 cubic metres of VLLW waste might be generated in the form of lagging (and a possible similar amount of that material might also arise but would not be classified as radioactive).
- 6.34 The current Lifetime Plan for the station envisages that all non-radioactive buildings will be demolished but that the reactor building will remain in place whilst radioactive decay takes place. The future demolition of the reactor would therefore be outside the period of the Waste Core Strategy.
- 6.35 The site operator at Sizewell A has also suggested that it might have a need to construct a building to house Intermediate Level Waste on a temporary basis. It is estimated that this might amount to 366 cubic metres of packaged waste but no specific proposal have yet been designed so no indication of the size of any required building is available. It is also possible that such waste might be capable of being stored within an existing building on the site.

- 6.36 The East of England Plan makes no sub-regional apportionment for Agricultural Waste.
- 6.37 The vast majority of agricultural waste is managed at farms on land or in facilities for which there is no requirement for planning permission. However, there are certain instances where larger centralised facilities that deal with agricultural wastes do require planning permission. The chicken litter fired power station at Eye is perhaps the best example of this in Suffolk.
- 6.38 Such facilities only deal with a small proportion of agricultural waste arising and it is expected that most wastes will continue to be managed in ways that do not require planning permission. Therefore, there is considered to be no merit in projecting levels of waste expecting to arise or the capacity of facilities to deal with this.

#### Conclusions in respect of Sub-regional Apportionment

- 6.39 The East of England Plan runs until 2021, however the Waste Core Strategy covers the period up until 2026. In the absence of regional guidance to plan for the period between 2021 and 2026 the additional capacity required has been calculated by continuing the 2020/1 figures for a further 5 years. Therefore, the apparent over provision in the early part of the plan period may be offset by the uncertainty later in the plan period.
- 6.40 The East of England Plan is however currently being reviewed and extended to cover the period to 2031 and is likely to include revised waste apportionment figures which are significantly lower than those included in the current document, especially for Commercial & Industrial waste. The County Council intends to work to the new apportionment figures as soon as the revised East of England Plan is adopted as policy. However, until the adoption of the replacement regional strategy, the provision within the Waste Core Strategy shall be based upon the existing figures as set out in Policy Waste Core Strategy below.

#### Policy WCS2 Management of Sub-regional Apportionment (thousand tonnes)

Provision will be made to manage those volumes of Municipal Solid Waste, Commercial & Industrial Waste and London Waste identified in the East of England Plan as being apportioned to Suffolk during the plan period. This apportionment may be subject to change as a result of revision of regional guidance. The latest adopted sub-regional apportionment will be applied in calculating the provision to be made for waste management facilities. Until a revised apportionment is adopted to cover the period until 2026 the figures set out below will be used.

Proposals for new waste management development or an extension of existing waste development will only be permitted where there is a demonstrated need. When considering the need for such facilities the County Council will take into account the capacity of existing recycling, composting, recovery and disposal facilities and proposed facilities that have planning permission or are the subject of a current planning application, and table 6.

Permission may be granted for waste development involving importation of waste from outside the Plan area where this is demonstrated to maximise recycling, composting and recovery of waste materials and be the most sustainable option, taking into account regional self sufficiency and the Regional Spatial Strategy, proximity to point of waste arising and the waste hierarchy.

	2010/11	2015/16	2020/21	2025/26
Municipal Solid Waste	501	519	538	538
Commercial & Industrial	1,149	1,320	1,538	1,538
London Waste	220	107	106	106

#### Presently available capacity

6.41 The location of the facilities discussed below is shown in Appendix 1.

#### Non-hazardous Landfill

6.42 There are 7 non-hazardous landfills in Suffolk (2009 figures). Table 3 above derived from Table W4 of the Suffolk County Council Minerals and Waste Development Framework Annual Monitoring Report for 2008/9 records that the remaining void space available was 7,585,409 cubic metres. At the average rate of fill for previous 3 years (878,496 cubic metres) the void space would be exhausted after 8.6 years during 2016/7.

#### Inert Landfill

6.43 There are 11 inert only landfills (2009 figures). Table 4 above derived from Table W5 of the Suffolk County Council Minerals and Waste Development Framework Annual Monitoring Report for 2008/9 records that the remaining void space available was 2,742,767 cubic metres. At the average rate of fill for previous 3 years (120,655 cubic metres) the void space would be exhausted after 23 years during 2032.

#### Planning Applications for additional Non-hazardous and Inert Landfill

6.45 Table W6 of the Suffolk County Council Minerals and Waste Development Framework Annual Monitoring Report records that during 2007/8 no planning applications were made for new sites.

#### Incinerators

6.46 There are 8 incinerators (with and without energy recovery) (2009 figures). The two largest incinerators are the Eye chicken litter powerstation and the Ipswich Hospital clinical incinerator. The remaining plants are much smaller and are used for pet incinerators etc. The total annual capacity of these facilities is 159,000 tonnes.

6.47 There are 18 Household Waste Sites (2009 figures). The total annual capacity of these facilities is 71,275 tonnes.

#### **Composting Plants**

6.48 There are 7 Composting Plants (2009 figures). The total annual capacity of these facilities is 175,000 tonnes.

#### **Recycled Aggregate Production Facilities**

6.49 There are 20 Recycled Aggregate Production Facilities (2009 figures). The total annual capacity of these facilities is 658,000 tonnes.

#### Scrap Yards/Vehicle Dismantling Facilities

6.50 There are 24 Scrap Yards/Vehicle Dismantling Facilities (2009 figures). The total annual capacity of these facilities is 9,425 tonnes.

Waste Water Treatment Facilities

6.51 There are 25 main Waste Water Treatment Facilities (2009 figures).

#### Materials Recycling Facilities

6.52 There is one Materials Recycling Facility (2009 figures). The total annual capacity is 150,000 tonnes.

#### Other Treatment/Transfer Facilities

6.53 There are 26 Other Treatment/Transfer Facilities (2009 figures). The total annual capacity of these facilities is 590,000 tonnes.

#### Capacity gap

- 6.54 Table 6 brings below together over the plan period of the Waste Core Strategy, the sub-regional apportionment for Municipal Solid Waste, Commercial & Industrial Waste and London Waste, together with other relevant factors including the existing non-hazardous landfill capacity and the proposed recycling, composting and recovery rates. From this table it is possible to quantify how much and when shortfalls in waste management capacity might occur. It possible to alter assumptions and thereby change the time, order and magnitude of what is considered will happen. However, the provision that is made within the Waste Core Strategy via proposals and policies for new waste management development is intended to be robust enough to accommodate a range of possible scenarios. The assumptions upon which this table is derived are set out in the footnote to the table.
- 6.55 Following the assumptions set out in Table 6 (and referred to in brackets below) the following shortfall in waste management provision is evident over the plan period of the Waste Core Strategy:

#### Recycling and composting facilities

 a continuing need for recycling and composting facilities amounting to 1,476,300 tonnes per annum (see Table 6: arisings multiplied by recycling and composting rate for both municipal and commercial & industrial waste for the year 2025/26);

#### Strategic Residual Waste Treatment Facilities

- 215,200 tonnes per annum of Residual Waste Treatment Facility capacity for Municipal Solid Waste (see Table 6: municipal waste to RWTF for 2025/26);
- 384,500 tonnes per annum of Residual Waste Treatment Facility capacity for Commercial & Industrial Waste (see Table 6: commercial & industrial waste to RWTF for 2025/26);

#### Strategic Non-hazardous Landfill

 12,876 tonnes of Non-hazardous Landfill for Municipal Solid Waste ash (see Table 6: BFA to landfill for municipal waste 2018/19 to 2025/26);

- 22,832 tonnes of Non-hazardous Landfill for Commercial & Industrial Waste ash (see Table 6: BFA to landfill for commercial & industrial waste 2018/19 to 2025/26);
- 239,312 tonnes of Non-hazardous Landfill for Inert Waste for cap and cover (see Table 6: cap & cover 2018/19 to 2025/26);
- 848,000 tonnes of Non-hazardous Landfill for London Waste (see Table 6: cap & cover 2018/19 to 2025/26);
- 1,114,766 tonnes in total of Non-hazardous landfill (see Table 6: void capacity at end of year 2025/26).
#### Table 6: Waste Capacity Requirements for Apportioned Waste

Landfill cap	bacity at 01/	04/2009	7,585,409														
Year	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Municipal																	
Arisings	483,000	501,000	505,000	509,000	512,000	516,000	519,000	523,000	527,000	530,000	534,000	538,000	538,000	538,000	538,000	538,000	538,000
R&C rate	0.4768	0.497	0.518	0.539	0.56	0.581	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Waste to RWTF	0	0	0	0	0	0	207600	209200	210800	212000	213600	215200	215200	215200	215200	215200	215200
BFA to landfill	0	0	0	0	0	0	1557	1569	1581	1590	1602	1614	1614	1614	1614	1614	1614
Amount to landfill	252706	252003	243410	234649	225280	216204	1557	1569	1581	1590	1602	1614	1614	1614	1614	1614	1614
Commercial & I	ndustrial																
Arisings	1,117,000	1,149,000	1,181,000	1,213,000	1,245,000	1,276,000	1,320,000	1,364,000	1,408,000	1,452,000	1,496,000	1,538,000	1,538,000	1,538,000	1,538,000	1,538,000	1,538,000
R&C rate	0.67	0.72	0.72	0.72	0.72	0.72	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Waste to RWTF	0	0	0	0	0	0	330000	341000	352000	363000	374000	384500	384500	384500	384500	384500	384500
BFA to landfill	0	0	0	0	0	0	2475	2558	2640	2723	2805	2884	2884	2884	2884	2884	2884
Amount to landfill	368610	321720	330680	339640	348600	357280	2475	2558	2640	2723	2805	2884	2884	2884	2884	2884	2884
Inert waste	000 444	000 444	000 444	000 444	000 444	000 444	000 444	000 444	000 444	0	0	0	0	0	0	0	0
mert waste	293,444	293,444	293,444	293,444	293,444	293,444	293,444	293,444	293,444	0	0	0	0	0	0	0	0
Cap & Cover	0	0	0	0	0	0	0	0	0	29,914	29,914	29,914	29,914	29,914	29,914	29,914	29,914
London Waste	242,000	220,000	197,000	174,000	152,000	129,000	107,000	106,000	106,000	106,000	106,000	106,000	106,000	106,000	106,000	106,000	106,000
	4 450 700	4 007 407	4 004 524	1 0 44 700	4 040 204	005 000	404 470	400 574	402.605	140.007	140.004	140.440	140 440	140 440	140 440	140.440	140,440
Use of landfill	1,150,760	1,087,167	1,064,534	1,041,733	1,019,324	995,928	404,476	403,571	403,665	140,227	140,321	140,412	140,412	140,412	140,412	140,412	140,412
Void Capacity at year end	6,428,649	5,341,482	4,276,948	3,235,215	2,215,891	1,219,963	815,487	411,917	8,252	-131,975	-272,296	-412,707	-553,119	-693,531	-833,943	-974,354	-1,114,766

#### **Assumptions**

Use exisiting East of England plan figures for waste arisings for both Municipal Solid Waste and Commercial & Industrial and "flat line" at 2010

Use Joint Municipal Waste Management Strategy recycling targets for Municipal Solid Waste (i.e. 60% by 2015)

Use East of England recycling, composting & recovery target for Commercial & Industrial waste i.e. 75% by 2015

Assume Residual Waste Treatment Facilities for Municipal Solid Waste and Commercial & Industrial Waste on stream in 2015/16

Assume residues similar to Energy from Waste i.e. 25% of volume as bottom Ash of which 3% cannot be recycled and ends up in landfill

Assumes continued input of "inert" waste to Non Hazardous landfill sites at current rates until existing void capacity is exhausted

RWTF capacity required 599,700

### Additional capacity required

- 6.56 The identified shortfall may partially be filled with smaller non-strategically sized facilities and their contribution will if they come forward be taken into account when considering future planning applications to avoid problems of over provision.
- 6.57 To make adequate provision in terms of providing sufficient sites to meet the subregional apportionment for Municipal Solid Waste, Commercial & Industrial Waste and London Waste the following provision has been made in Policies WCS3, 4 and 5.
- 6.58 Please note that the figure of 1,476,300 set out in Policy WCS3 below is derived by applying the relevant recycling and composting rates to both the municipal and commercial & industrial wastes arisings figures in order to work out the total amount that would need to be recycled and composted in 2025/6 and then by adding the two figures together.

# Policy WCS3 Provision for the Recycling and Composting of Waste

The County Council will plan for a quantity of waste recycling and composting of at least 1,476,300 tonnes per annum, in compliance with Table 6. Relevant planning applications will be determined by reference to the appropriate criteria based policies. When considering the need for such facilities the County Council will take into account the capacity of existing recycling and composting facilities and proposed facilities that have planning permission or are the subject of a current planning application.

Policy WCS4 Allocated sites for Strategic Residual Waste Treatment Facilities

The County Council will plan for a quantity of Residual Waste Treatment capacity of up to 599,700 tonnes of waste per annum. Favourable consideration will be given to proposals for Strategic Residual Waste Treatment Facilities (annual capacity of 100,000 tonnes or more) within the following locations:

# **Specific Site**

a) Site 29, Suffolk County Council Highways Depot, Lodge Lane, Great Blakenham;

# Areas of Search

- b) Site 2, Former Sugar Refinery, Sproughton Road, Sproughton;
- c) Site 27, Eye Airfield Industrial Estate, Eye and Yaxley, and;

d) Site 28, Masons Quarry, Great Blakenham.

When considering the need for such facilities the County Council will take into account the capacity of existing recycling, composting and recovery facilities and proposed facilities that have planning permission or are the subject of a current planning application, and Table 6.

The treatment of waste that could practicably be recycled or composted will not be acceptable. Conditions will be placed on planning permissions to ensure that only residual source-separated or pre-sorted waste is treated. Facilities that burn waste must provide for the recovery of energy and the use of combined heat and power will be encouraged. Policy WCS5 Specific sites for Non-hazardous Landfill

The County Council will plan for a quantity of Non-Hazardous Landfill capacity of up to 1,114,766 tonnes, in compliance with Table 6. Favourable consideration will be given to the following proposals for Non-Hazardous Landfill:

- a) extension of time and broadening of accepted waste categories to include Municipal Solid Waste residues at Site W7, Layham Landfill Site, Layham;
- b) establishment of new Non-hazardous Landfill at Site 67, Thorington;
- c) extension within the existing site boundaries to the existing Non-hazardous Landfill at Site W17, Foxhall Landfill Site, Foxhall, and;
- d) re-contouring of existing Non-hazardous Landfill at Site W11, Masons Landfill Site, Great Blakenham.

When considering the need for such facilities the County Council will take into account the capacity of existing recycling, composting, recovery and landfill facilities and proposed facilities that have planning permission or are the subject of a current planning application.

The landfilling of waste that could practicably be recycled, composted or recovered will not be acceptable. Conditions will be placed on planning permissions to ensure that only residual source-separated or pre-sorted waste is landfilled.

Proposals for landfill gas energy recovery will be required.

# **Chapter 7: Development Management Policies**

7.1 These policies are intended to provide more detailed criteria for the consideration of planning applications for waste management and other development that might potentially have an impact upon waste management facilities.

#### Safeguarding of existing sites

7.2 The County Council considers that it should seek to safeguard existing (see Appendix 1) or proposed waste management facilities from development that would require the closure or relocation of the existing facility or prevent the development of a new facility where such facilities are in accordance with the Waste Core Strategy. Similarly, existing waste management facilities should be safeguarded from development which might be adversely affected by operations at the waste management facility and which could give rise to legitimate complaint from residents or businesses.

### Policy WDM1 Safeguarding of waste management sites

The Waste Planning Authority will seek to safeguard existing sites and sites proposed for the re-use, recycling and composting, transfer, treatment, recovery or disposal of waste as shown in Appendix 1 of the Waste Core Strategy and on the Proposals and Inset Maps and will object to development proposals that would prevent or prejudice the use such sites for those purposes unless suitable alternative provision is made.

The Waste Planning Authority will seek to safeguard Areas of Search identified in policy WCS4 and shown on the Proposal and Inset Maps and will encourage only development proposals that would not prevent or prejudice the potential for a strategic residual waste treatment facility. This safeguarding is not intended to preclude other forms of development within the Area of Search which do not prejudice or would not be prejudiced by a strategic residual waste treatment facility.

Development proposals in close proximity to existing sites, Specific Sites or Areas of Search should demonstrate that they would not prejudice or be prejudiced by a waste management facility. The safeguarding policy will also apply to any site where planning permission has already been granted.

#### **General Considerations**

7.3 Policy WDM2 sets out a number of general considerations for all waste management development.

Policy WDM2 General considerations relevant to all waste management facilities

In general waste management development will be acceptable so long as the proposals adequately address, where appropriate, the following:

- a) Potential for adverse impact upon the integrity of Natura 2000 sites;
- b) Potential flood risk;
- c) Potental impact of proposed vehicle movements and access design;
- d) Potential impact upon landscape;
- e) Potential impact upon biodiversity;
- f) Potential impact upon archaeological or cultural heritage;
- g) Requirements of PPG13 including the use of rail freight shipping;
- h) Compatibility with neighbouring landuse;
- i) Potential impact upon agricultural land;
- j) Potential impact from noise and vibration;
- k) Potential impact upon air quality including odour;
- I) Potential visual impact, including from lighting;
- m) Potential impact upon the local water environment;
- n) Land instability;
- o) Site management issues including litter, vermin and birds.

#### Inert Waste Only Landfill

7.4 There is no sub-regional apportionment for inert waste, which includes construction, demolition and excavation waste. At current rates of filling the existing inert only void space would be filled by 2032. This calculation does not include the potential void space that would be created by existing mineral extraction permissions with restoration schemes that rely on the subsequent importation of inert waste

materials. It is therefore considered prudent to include a policy for inert waste only landfill to for example allow for restoration materials to be imported for future minerals development.

7.5 The following policy for inert waste only landfill will apply to any planning applications for inert only landfill determined during the plan period.

Policy WDM3 Approval of sites for disposal of inert waste by landfilling or landraise

Additional voidspace or areas of landraise for the deposit of inert waste will be acceptable where:

- a) There is an identified need for inert waste to be disposed of in this manner. When considering the need for the disposal of inert waste by landfill or landraise the County Council will take into account the capacity of existing inert waste recycling and landfill facilities and proposed facilities that have planning permission or are the subject of a current planning application, and if the importation of inert waste is required for restoration of a former mineral extraction void;
- b) There is no acceptable alternative form of waste management that can be made available to meet the need. The landfilling of inert waste that could practicably be recycled will not be acceptable. Conditions will be placed on planning permissions to ensure that only pre-sorted wastes are landfilled;
- c) The proposals comply with the general considerations set out in Policy WDM2.

#### Non-hazardous landfill

- 7.6 The Core Strategy has identified a number of sites for additional non-hazardous landfill capacity. This additional capacity is considered sufficient to meet the anticipated need for non-hazardous landfill in the County during the plan period.
- 7.7 National and regional policy seeks to move waste management up the waste hierarchy. The Vision set out in the Core Strategy envisages that by the end of the plan period only wastes that cannot practicably be recycled or composted, or are

themselves the products of other residual waste treatment processes, will be landfilled.

- 7.8 The Core Strategy will therefore seek to ensure that there is no significant over provision of non-hazardous landfill capacity as this would not promote or encourage other forms of waste management further up the waste hierarchy.
- 7.9 However, it is considered prudent to include a generic development control policy for non-hazardous landfill for the following reasons:
  - a) The forecast figures for the volumes of non-hazardous waste that has to be accommodated during the Plan period are dependent on the timely introduction of Residual Waste Treatment facilities and the achievement of the targets for increasing re-use, recycling and composting of waste set out in the East of England Plan and;
  - b) It is possible that on further detailed investigation the capacity available in sites identified for non-hazardous landfill in this Core Strategy may be less than estimated.
- 7.10 The need to protect major aquifers and sources of water abstraction is a major constraint on identifying sites that are suitable for non-hazardous landfill in Suffolk. The Environment Agency has provided guidance on locations where landfill or landraise may be suitable, subject to detailed investigation.
- 7.11 The following policy would apply to any planning applications for non-hazardous landfill on sites not already allocated in the Waste Core Strategy.

Policy WDM4 Approval of sites for disposal of non-hazardous waste by landfilling or landraise.

Additional voidspace or areas of landraise not specifically identified in the Waste Core Strategy for the deposit of non-hazardous wastes will be approved where:

- a) There is an identified need for waste apportioned to Suffolk by the East of England Plan to be disposed of in this manner, with reference to Table 6. When considering the need for such facilities the County Council will take into account the capacity of existing recycling, composting, recovery and landfill facilities and proposed facilities that have planning permission or are the subject of a current planning application or are identified within the Waste Core Strategy, and;
- b) No acceptable alternative form of waste management can be made available to meet the need. The landfilling of waste that could practicably be recycled, composted or recovered will not be acceptable. Conditions will be placed on planning permissions to ensure that only residual source-separated or presorted waste is landfilled, and;
- c) The site meets the specific criteria set out in Appendix 4 and Policy WDM2.

Proposals for landfill gas energy recovery will be required.

# General waste management facilities other than for residual waste treatment facilities and landfill sites

7.12 The following policy sets out the types of landuse where general waste management facilities might potentially be developed subject to the other policies of the development plan.

### Policy WDM5 General Waste Management Facilities

General waste management facilities (other than strategic residual waste management facilities and landfill sites) are considered, in principle, unless otherwise stated, to be suitable for location within the following areas:

- a) Land in existing waste management use;
- b) Land in existing General Industrial use (B2 Use Class) or in existing Storage or Distribution use (B8 Use Class) (excluding open air composting);
- Land allocated for B2 and B8 purposes in a Local Plan or Development Plan Document (excluding open air composting);
- d) Within or adjacent to Agricultural and Forestry Buildings;
- e) Agricultural and Forestry Land (open air composting only);
- f) Brownfield land (excluding open air composting);
- g) Unallocated Former Airfields (open air composting only);
- h) Waste Water Treatment Facilities (composting and anaerobic digestion only);
- Current and former mineral workings (open air compositing and construction, demolition and excavation waste recycling only).

Proposals must also comply with the general considerations set out in Policy WDM2. When considering the need for such facilities the County Council will take into account, where applicable, if there is an identified need for waste apportioned to Suffolk by the East of England Plan to be disposed of in this manner, with reference to Table 6. as well as the capacity of existing recycling, composting, recovery and disposal facilities and proposed facilities that have planning permission or are the subject of a current planning application.

# <u>Residual Waste Treatment facilities with a capacity of less than 100,000 tonnes</u> <u>annual throughput</u>

- 7.13 The Core Strategy has identified a number of sites for Residual Waste Treatment facilities. These have been defined as strategic facilities with a capacity to handle 100,000 tonnes of waste per annum or more.
- 7.14 It is likely that some residual waste will be treated in smaller "non strategic" facilities. The Core Strategy does not seek to identify sites for such facilities.

Proposals for such facilities (i.e. those with a capacity of less than 100,000 tonnes annual throughput) will be judged against Policy WDM6 below.

Policy WDM6 Residual Waste Treatment facilities with a capacity of less than 100,000 tonnes annual throughput

Residual Waste Treatment facilities with a capacity of less than 100,000 tonnes annual throughput will be acceptable where the proposed facility is on land:

a) Within the uses set out in Policy WDM5, and;

b) The site meets the specific criteria set out in Appendix 3 and Policy WDM2.

The treatment of waste that could practicably be recycled or composted will not be acceptable. Conditions will be placed on planning permissions to ensure that only residual source-separated or pre-sorted waste is treated. Facilities that burn waste must provide for the recovery of energy and the use of combined heat and power will be encouraged.

### Waste Transfer Stations, Materials Recycling Facilities, Household Waste Recycling Centres, End of Life Vehicle Facilities and Waste Electrical and Electronic Equipment Recovery Facilities

7.15 Waste Transfer Stations, Materials Recycling facilities, End of Life Vehicle Facilities and Waste Electrical and Electronic Equipment Recovery Facilities have similarities. Waste is collected and brought to the site where it is sorted and the recyclate is then distributed to other facilities to be used as a raw material. A small volume of waste that cannot be recycled is then sent either to landfill or to Residual Waste Treatment facilities. Policy WDM7 Waste Transfer Stations, Materials Recycling Facilities, End of Life Vehicle Facilities and Waste Electrical and Electronic Equipment Recovery Facilities

Waste Transfer Stations, Material Recycling Facilities, End of Life Vehicle Facilities and Waste Electrical and Electronic Equipment Recovery Facilities will be acceptable within purpose designed or suitably adapted facilities on land within the uses identified within Policy WDM5.

Proposals for such facilities at landfill sites will be considered acceptable on a temporary basis whilst landfilling and restoration activity is taking place on site. Any temporary planning permissions will be linked to the time limits relating to the landfill activities on site.

The proposals shall comply with the general considerations set out in Policy WDM2.

# Household Waste Recycling Centres

- 7.16 Household Waste Recycling centres are provided by the County Council and are available for residents to dispose of a variety of household wastes. A variety of waste collection facilities are provided on such sites and the waste is effectively sorted by the public selecting the appropriate container. The sorted wastes are then distributed to landfill, other recycling facilities or users of raw material.
- 7.17 There is a network of existing Household Waste Recycling Centres in Suffolk which has developed and evolved over time. Some are located on industrial estates others on existing or former landfill sites. They vary in scale and in terms of the range of facilities provided.
- 7.18 The County Council has recently let a new contract for the management of its Household Waste Recycling Centres. It is possible that proposals for new or improved HWRC facilities will emerge because of this new contract and Policy WDM8 will be used to assess any planning applications that are submitted for new or amended HWRCs.

Policy WDM8 Household Waste Recycling Centres

Household Waste Recycling Centres will be acceptable within purpose designed or suitably adapted facilities on land within the land uses identified within Policy WDM5.

Proposals for such facilities at landfill sites will be considered acceptable on a temporary basis whilst landfilling and restoration activity is taking place on site. Any temporary planning permissions will be linked to the time limits relating to the landfill activities on site

Where it can be demonstrated that no suitable sites consistent with Policy WDM5 are available within the area to be served by the Household Waste Recycling Centre, Household Waste Recycling Centres will be acceptable on other sites provided these are consistent with Policy WDM2 and are accessible to the public.

# **Composting Facilities**

- 7.19 Composting of waste can significantly reduce the amount of bio-degradable waste that needs to be disposed of to landfill and is an activity that is located towards the top of the waste hierarchy.
- 7.20 There are various methods of composting which are broadly distinguished by whether the material is composted in an enclosed facility or in the open air. Composting is distinguished from anaerobic digestion because it is carried out in aerobic conditions.
- 7.21 The output of composting activities may be used as compost or as a soil improver.
- 7.22 The Core Strategy promotes composting subject to satisfactory safeguards relating in particular to the prevention of odour and to the minimisation of risk to human health associated with the generation of environmental impacts such as dust and bio-aerosols.

Enclosed composting facilities will be acceptable on land within the uses identified within Policy WDM5

Proposals for enclosed composting will not be approved unless they are accompanied by a site-specific risk assessment which shows that the bioaerosol levels can be maintained at appropriate levels at dwelling or workspaces within 250m of a facility. Appropriate schemes for the management of odours and dust will also be required.

Proposals shall comply with the general considerations set out in Policy WDM2.

Policy WDM10 Open Air Composting

Open air composting facilities will be acceptable on land within the uses identified within Policy WDM5.

At landfill sites, open air composing proposals that will extend the life of landfill operations will be acceptable if the continued operations do not:

- a) Result in unacceptable environmental damage, or;
- b) Perpetuate recycling activity poorly related in relation to sources of waste, or;

c) Lead to unreasonable delay in restoration.

Proposals for open air composting will not be approved unless they are accompanied by a site-specific risk assessment based on clear independent evidence which shows that the bio-aerosol levels can be maintained, throughout the life of the operations, at appropriate levels at dwellings or workspaces within 250m of a facility. Appropriate schemes for the management of odours and dust will also be required.

Proposals shall comply with the general considerations set out in Policy WDM2.

# **Anaerobic Digestion**

- 7.23 Anaerobic digestion is the process by which waste material is broken down by microbial activity in an anaerobic environment. Typically, this will be in some form of silo or container. This process requires the facility to be fully enclosed and airtight to allow the anaerobic process to take place in a controlled manner.
- 7.24 The process generates a gas "bio-gas", which is a mixture of methane and carbon dioxide and which can be burnt to produce energy. Alternatively it can be pumped into the national gas grid or be used to fuel suitably adapted vehicles. It also produces a "digestate" which is a mixture of liquid and solid residues which can be used as fertiliser or as a soil improver.
- 7.25 Anaerobic digestion is particularly suitable for dealing with food waste from private households, food residues, restaurant and catering waste and farm manure.
- 7.26 Anaerobic digestion can be carried out at a variety of scales and therefore it is potentially suitable for being located at a wide variety of locations. The Core Strategy seeks to encourage anaerobic digestion facilities in appropriate locations.
- 7.27 PPS22 Renewable Energy seeks to encourage the promotion of renewable energy projects such as Anaerobic Digestion and indicates that these might be acceptable "where it can be demonstrated that if the objectives of designation of the area will not be compromised by the development and any significant adverse effects on the qualities for which the area that has been designated are clearly outweighed by the environmental, social and economic benefit".

# Policy WDM11 Anaerobic Digestion Anaerobic digestion facilities will be acceptable on land:

- a) Within the uses identified within Policy WDM5; or
- b) Integrated with Waste Water Treatment Plants.

Proposals shall comply with the general considerations set out in Policy WDM2.

#### Recycling or transfer of inert and construction, demolition and excavation waste

- 7.28 A considerable amount of waste generated in the County originates from construction, demolition and excavation activities (CD&E waste). Gaining reliable information on the amount of waste arisings is difficult as much material is generated and consumed on building sites or is processed on construction sites and contracted to be taken directly to its point of disposal, recycling, or reuse.
- 7.29 As part of its mineral extraction and waste surveys the County Council annually monitors sites at which inert wastes are processed and, for construction sites, seeks to estimate the volume of such waste generated.
- 7.30 There are significant potential environmental benefits from the reuse of CD&E waste. If the materials are used, then this will reduce the amount of virgin aggregate that needs to be extracted; it will reduce the amount of void space that is required for disposing of such waste and can reduce transportation by reusing materials on site, where practicable.
- 7.31 Not all such wastes can be used or processed on the sites where they originate. There are a number of facilities/sites in the County that receive and process CD&E waste. These may be located in a wide variety of locations including mineral workings, existing landfill sites and in farm buildings.

Policy WDM12 Proposals for recycling or transfer of inert and construction, demolition and excavation waste

Proposals for recycling or transfer of inert and construction, demolition and excavation waste will be acceptable on land within the uses identified within Policy WDM5.

At mineral sites, planning permission will be limited to the life of the mineral operation.

At landfill sites, proposals that will extend the life of landfill operations will only be acceptable if the continued operations do not;

- a) Result in unacceptable environmental damage, or
- b) Perpetuate recycling activity poorly related in relation to sources of waste; or;
- c) Lead to unreasonable delay in restoration.

On land suitable for General Industrial or Storage & Distribution uses, activities shall take place within purpose-designed facilities.

Proposals shall comply with the general considerations set out in Policy WDM2.

# Waste Water Treatment Plants

- 7.32 Waste Water Treatment plants are a vital part of community infrastructure and are necessary to protect human health and water quality. Existing Waste Water Treatment plants are identified in Appendix 1. These will be safeguarded through the application of Policy WDM1.
- 7.33 No proposals for new Waste Water Treatment plants were proposed by Anglian Water as part of the "call for sites". However, such facilities may be required (either new or extended facilities) to cater for the proposed levels of growth projected to occur in Suffolk over the Plan period.
- 7.34 The Core Strategy will support the provision of such infrastructure provided it does not give rise to unacceptable environmental impacts.

Policy WDM13 Waste Water Treatment

New or extended Waste Water Treatment facilities will be acceptable where such proposals aim to improve the quality of discharged water or reduce the environmental impact of operation. The developer will be required to demonstrate that the proposal can be located without giving rise to unacceptable environmental impacts.

Proposals shall comply with the general considerations set out in Policy WDM2.

#### Nuclear waste

#### Managing Low Level and Very Low Level Radioactive Waste

- 7.35 In 2007, the Government published a revised policy for managing all arisings of solid Low Level Radioactive Waste (LLW) in the UK. The Nuclear Decommissioning Authority (NDA) is responsible for producing a UK Strategy for dealing with LLW arising from licensed nuclear sites based on this national policy. A draft UK Nuclear Industry LLW Strategy was published in March 2009 and the final Strategy is expected to be published in early 2010.
- 7.36 Sizewell A Nuclear Power Station is in the process of being decommissioned. This is likely to give rise to a quantity of Low and Very Low Level radioactive waste (VLLW). This would be relatively "high volume, low activity" radioactive waste associated with the demolition of the Station.
- 7.37 Sizewell B Nuclear Power Station is an operating power station that is expected to continue generating electricity until at least 2035. The process of operating the power station also gives rise to amounts of LLW and VLLW, although in smaller amounts than from a decommissioning power station.
- 7.38 The national policy for handling such wastes is to deal with them as far up the waste hierarchy as possible. It is likely however that there will be some of these wastes that will need to be disposed of either on or adjacent to licensed nuclear sites or to landfill sites elsewhere.

- 7.39 Traditionally, LLW from Sizewell has been sent to the LLW Repository in Cumbria. This however has only limited capacity and would not be capable of receiving all the LLW currently estimated to arise from those nuclear power stations currently operating and those that are being decommissioned.
- 7.40 The site operators of Sizewell A, Magnox (South), will work with local stakeholders, including the County Council as Waste Planning Authority, to consider options for dealing with their waste. British Energy, the operators of Sizewell B are also considering options for dealing with spent nuclear fuel.
- 7.41 The Waste Core Strategy addresses the issue of LLW and VLLW management in relation to Sizewell Power Stations.
- 7.42 Current Environment Agency guidance is that some LLW and VLLW radioactive wastes may be suitable for disposal at existing non-hazardous landfill sites. Planning permission may be required for such disposal depending on the conditions attached to any existing planning permission. An appropriate consent/permit from the Environment Agency would also be required.
- 7.43 National policy on handling Low Level Radioactive Waste suggests that consideration should be given to managing waste as close to its source as possible. The Waste Core Strategy therefore provides for LLW and VLLW to be disposed of within the currently Licensed area at Sizewell subject to the caveats set out in Policy WDM14 below.

Policy WDM14 Treatment, storage and disposal of Low and Very Low Level radioactive waste at Sizewell nuclear power stations.

Facilities for the treatment, storage or disposal of LLW or VLLW generated at Sizewell nuclear power stations will be acceptable within the Nuclear Licensed Areas at Sizewell where:

- This is consistent with the national strategy for managing Low Level and Very Low Level radioactive wastes and discharges and/or the decommissioning plans for the Sizewell stations, and;
- b) The outcome of economic and environmental assessments justify it being dealt with on site, and;
- Facilities are located and designed in order to minimise adverse impacts on the environment;

Only Low Level or Very Low Level radioactive waste generated at Sizewell shall be treated, stored or disposed of in such facilities.

Proposals shall comply with the general considerations set out in Policy WDM2.

# Managing Intermediate Level Waste and Spent Fuel

- 7.44 Sizewell B Power Station remains in operation and generates quantities of spent fuel and Intermediate Level Radioactive Waste (ILW) as part of its normal operations. This is in addition to the LLW and VLLW outlined above. Spent fuel is stored in "ponds" on site while ILW is stored in specially designed tanks pending the availability of a national geological radioactive waste repository for this type of waste. (This is a long-term proposal which is subject to consultation by the Government.
- 7.45 British Energy, which operates the Sizewell B plant, has indicated that it may need to provide additional storage facilities on site for storing spent fuel as the existing ponds are unlikely to have sufficient capacity to contain the spent fuel anticipated to arise during the period of operation of the Power Station.

- 7.46 This material would be housed in a new building pending either opportunities for reprocessing the fuel or the implementation of the national geological radioactive waste repository.
- 7.47 British Energy considers that this additional storage capacity is an integral part of its electricity generation operation and has indicated that it intends to seek consent for this new storage building by making an application to the Department of Energy and Climate Change under the Electricity Act 1981 rather than by applying to the County Council for planning permission under the Town & Country Planning Act. The County and District Councils would be consultees to such an application.
- 7.48 Notwithstanding the route by which consent is sought, the County Council considers that the Waste Core Strategy should contain policies relating to the potential for storage of such materials at Sizewell.
- 7.49 Sizewell A Power Station is decommissioning and is in the process of removing all of the spent fuel from the site for final reprocessing. It also has quantities of ILW stored in tanks and vaults pending the availability of a suitable disposal facility. It is possible that a new storage facility to house stored ILW will also be required at Sizewell A.
- 7.50 Policy WDM15 provides for the implementation of such facilities within the confines of the Licensed Site. The Policy provides only for the interim storage of spent fuel and ILW generated at Sizewell to be stored on the site, pending the availability of a disposal route. The policy would apply solely to the storage of ILW and would not permit the disposal of Intermediate Level Waste at the site.

Policy WDM15 Treatment and storage of Intermediate Level radioactive waste and spent fuel generated at Sizewell nuclear power stations

Facilities for the treatment or storage of Intermediate Level radioactive waste and spent fuel generated at Sizewell will be acceptable only within the Nuclear Licensed areas where:

- a) This is consistent with the national strategy for managing Intermediate Level radioactive waste and spent fuel and discharges, and;
- b) The outcome of economic and environmental assessments justify it being dealt with on site, and;
- c) Facilities are located and designed in order to minimise adverse impacts on the environment.

Only Intermediate Level radioactive waste or spent fuel generated within a Nuclear Licensed area at Sizewell shall be treated or stored in such facilities. There shall be no disposal of Intermediate Level radioactive waste or Spent Fuel.

Proposals shall comply with the general considerations set out in Policy WDM2.

# Hazardous Waste

- 7.51 The volume of hazardous waste generated in Suffolk is low. Most of this is taken to hazardous waste treatment facilities or hazardous waste landfills elsewhere in the Country. There are no "hazardous landfill sites" in Suffolk (although some material such as asbestos may be disposed of to cells within specific non-hazardous landfill sites in accordance with the conditions of their Environmental permits granted by the Environment Agency).
- 7.52 The East of England Regional assembly has commissioned research into the need for additional hazardous waste landfill capacity in the Region. This concluded that there was a shortfall of landfill capacity for hazardous waste. It is proposed that this will be addressed in the next review of the East of England Plan.

- 7.53 It is too early to say whether Suffolk should be making any provision for hazardous waste landfill or whether the County would be capable of handling such sites given the nature of its underlying geology and heavy reliance on ground water for providing potable water supply.
- 7.54 Therefore, the Waste Core Strategy does not make any provision for hazardous waste landfill capacity. If the review of the East of England Plan indicates that Suffolk should make provision for any hazardous waste capacity in future, this will be addressed through a review of the Core Strategy.
- 7.55 Notwithstanding this, there may be a need to collect, transfer, store, process and treat hazardous waste in the County before being sent for final disposal or treatment.

Policy WDM16 Transfer, storage, processing & treatment of hazardous waste.

Facilities for the transfer, storage, processing and treatment (including incineration) of hazardous waste will be acceptable where they meet a demonstrable regional need of which a significant proportion arises from Suffolk, and are on land:

- a) In existing General Industrial use (B2), in Storage and Distribution use (B8) or identified for these uses in a Local Plan or Development Plan Document or;
- b) Integrated within an establishment producing much of the waste that will be dealt with.

Facilities for the transfer and short-term storage of hazardous waste will also be acceptable on existing waste management sites identified as having potential for non-hazardous waste transfer where hazardous waste will only represent a small proportion of waste managed on site.

Proposals shall comply with the general considerations set out in Policy WDM2.

# Sustainable Construction and Demolition, Climate Change Mitigation and Adaptation, and Design of Waste Management Facilities

7.56 This policy seeks to facilitate the efficient use of resources by promoting the principles of sustainable construction. This embraces waste minimisation, re-use and recycling during construction and demolition, together with the use of recycled

and secondary materials during construction and design principles that maximise the sorting, recycling and composting of waste arising from the use of the development itself. This policy is intended to be used primarily by District Councils during their consideration of development proposals.

Policy WDM17 Waste reduction, sustainable construction and demolition and provision of waste management facilities within new development

Development should be designed and constructed to minimise the creation of waste, make maximum use of recycled materials and facilitate the collection, separation, sorting, recycling and recovery of waste arising from the development.

Within major developments provision for occupiers of the development should be made for waste management facilities to enable the sustainable management of waste through the provision of recycling/compost facilities (bring sites) and/or facilities within individual or groups of properties for the source separation and storage of different types of waste for recycling and/or composting.

Proposals for new development should incorporate the following:

- a) Construction and demolition methods that minimise waste generation and reuse/recycle materials, as far as practicable on site.
- b) Design principles and construction methods that minimise the use of primary aggregates and encourage the use of high quality building materials made from recycled and secondary sources.
- c) Design and layout principles that reduce the amount of waste produced and allow for the effective sorting, recycling and composting of waste where appropriate.
- 7.57 As with other forms of development, Waste Management Facilities need to take into considerations related to climate change.

# Policy WDM18 Climate Change mitigation and adaptation

New waste management facilities should through their construction and operation minimise their potential contribution to climate change through reducing carbon emissions, incorporate energy and water efficient design strategies and be adaptable to future climatic conditions. Proposals for new waste facilities should incorporate the following:

- a) Take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption, including maximising cooling and avoiding solar gain in the summer;
- b) Be planned so as to minimise carbon dioxide emissions, and support opportunities for decentralised and renewable or low-carbon energy supply;
- c) Give priority to the use of sustainable drainage systems, paying attention to the potential contribution to be gained to water harvesting from impermeable surfaces and encourage layouts that accommodate waste water recycling;
- d) Take account of potential changes in climate;
- e) Incorporate proposals for sustainable travel including travel plans where appropriate.
- 7.58 Enviros, on behalf of DEFRA, has published a document entitled "Designing waste facilities- a guide to modern design in waste.
- 7.59 Developers will be expected to have had regard to this advice in designing new or extended waste facilities.

Policy WDM19 Design of waste management facilities

Waste management facilities will be considered favourably where they incorporate:

- a) Designs of an appropriate scale, density, massing, height and materials;
- b) Safe and convenient access for all potential users;
- Schemes for the retention of existing and provision of new landscape features;
- d) Measures which will protect, preserve and where practicable enhance the natural, historic and built environment.

# Chapter 8: Sites Allocated For Strategic Residual Waste Treatment Facilities

Site	Site name	Parish	District/Borough Council	Grid Ref
2	Former Sugar Refinery,	Sproughton	Babergh	TM136448
	Sproughton Road			
27	Eye Airfield Industrial	Eye and Yaxley	Mid Suffolk	TM136755
	Estate			
28	Masons Quarry	Great Blakenham	Mid Suffolk	TM115502
29	Suffolk County Council	Great Blakenham	Mid Suffolk	TM123496
	Highways Depot, Lodge			

Lane

	Identified Sites
	Area of Outstanding Natural Beauty (AONB)
22222	Conservation Area
	County Wildlife Site (CWS)
2000	Local Nature Reserve (LNR)
11111	National Nature Reserve (NNR)
	Historic Parks & Gardens
	Ramsar site
	Site of Special Scientific Interest (SSSI)
	Special Area of Conservation (SAC)
10000	Special Landscape Area (SLA)
	Special Protection Area (SPA)
	KEY TO SITE MAPS
	Waste Core Strategy Final Consultation DPD
	July 2009

# Site 2: Former Sugar Refinery, Sproughton Road, Sproughton

Status: Area of Search Site owner: J G Land & Estates Overall site area: 34.4ha Area required: approximately 5ha Potential use: strategic residual waste treatment facility

# Overview

- 8.1.1 This site was formerly occupied by a sugar refinery, which processed sugar beet from the surrounding area into sugar and other sugar products. The site is awaiting redevelopment and is designated in the Babergh Local Plan for employment use.
- 8.1.2 The County Council will seek to work with the landowner and the District Council with a view to drawing up a development brief for the site, in accordance with the Development Plan. In safeguarding the site the County Council will rely on Policy WDM1. It is estimated that a strategic waste facility would require approximately 5 hectares of the total site, excluding access roads.
- 8.1.3 The site is well located in relation to the Strategic Lorry Route Network, with good access onto the A14 (T) via a short section of Sproughton Road. There is also potential to create a rail link with the adjacent main line.
- 8.1.4 The Local Plan indicates that the site abuts a Special Landscape Area, but is partly within the boundary of the existing built up area. The site also lies within the Greenways Countryside Project Area.
- 8.1.5 The site overlies a major aquifer, is close to nearby groundwater abstractions and is within Groundwater Source Protection Zone 3. The site is also located within a Nitrate Vulnerable Zone. Precautions therefore must be taken to prevent contamination.

- 8.1.6 Although the site is located within the floodplain (Flood Zone 3), further investigation has revealed that the combination of existing defence structures and ground levels within the site protect the site from the threat of flooding.
- 8.1.7 The archaeological potential of the site may have been compromised to some extent by the previous development of the site although evaluation will still be required and the site is considered to have high archaeological potential.
- 8.1.8 Ground conditions within the site are variable with made ground, areas occupied by large-scale redundant structures and an area contaminated with ammonia arising from washing fertilizer off the sugar beet. Appropriate remediation and stabilisation will be required.
- 8.1.9 The western and southern boundaries of the site are covered by a Tree Preservation Order. These areas should be protected and preferably enhanced.
- 8.1.10 High voltage overhead electricity lines also run along the western and southern boundaries of the site. A suitable standoff margin will be required.
- 8.1.11 The site is within the statutory birdstrike zone surrounding RAF Wattisham. However, the nature of Residual Waste Treatment Facilities is such that waste would be completely contained within the building and there would be no threat to aircraft from birdstrike resulting from flocks being attracted to piles of untreated waste in the open.
- 8.1.12 Modelling carried out by consultants suggests that air quality could be maintained above guidelines.

#### **Environmental Safeguards**

- 8.1.13 The following assessments would be likely to be required as part of an Environmental Assessment in support of a planning application for a strategic residual waste treatment facility.
  - Transport Impact Assessment
  - Flood Risk Assessment

- Archaeological Evaluation
- Contaminated Land Study
- Visual Assessment
- Air Quality Assessment
- Noise Assessment
- Ecological Assessment
- Hydrogeological Assessment
- 8.1.14 The above studies would, where appropriate, need to identify suitable means of mitigation so that recognised environmental standards would be met.
- 8.1.15 An Appropriate Assessment that considers the potential for significant impacts upon ecological sites protected by European Legislation would also be required in the case of a planning application for a strategic Energy from Waste development at this site. Such an assessment would need to take into account the in-combination effects including potentially other strategic Energy from Waste developments at Masons Quarry (Site 28) and the Highways Depot (Site 29).

#### **Buffer Protection Areas**

- 8.1.16 To the north, the site is bounded by Sproughton Road and beyond that is an existing employment area. To the east of the site runs the Norwich to London Liverpool Street main railway line, which at this point is upon an embankment. Beyond the embankment is a retail and commercial area. To the south of the site is an island, which is designated as a natural area in the Babergh Local Plan, formed by the River Gipping and a canalised section of the river. Also to the south of the site is a residential area, on the opposite bank of the River Gipping. To the west lays the A14 (T), farmland and the River Gipping, alongside which runs the Gipping Valley Path. Beyond the A14 (T) is the village of Sproughton.
- 8.1.17 Because of the size of the site, there would be the potential to provide a landscaped bund within the western and southern boundaries to augment the existing bund along the eastern most part of the southern boundary and eastern boundary. This is something already proposed by J G Land & Estates

8.1.18 An existing Tree Preservation Order covers an extensive area of tree planting within the existing area of the site and upon the island site to the south of the site, which is within the same ownership. Potentially these existing trees could be augmented by further extensive tree planting. This would be beneficial in particular to the residential areas to the south of the site and to users of the Gipping Valley Path.

#### Conclusion

8.1.19 A large site on the fringes of Ipswich that is also well related to the Strategic Lorry Route Network. Proposals must ensure that sensitive surrounding land-uses are adequately safeguarded visually as well as in terms of noise, air quality and amenity.





#### Site 27: Eye Airfield Industrial Estate, Eye and Yaxley

Status: Area of Search Site owner: (multiple ownership) Area of site: 81.35ha Area required: approximately 5ha Potential use: strategic residual waste treatment facility

#### Overview

- 8.2.1 This site occupies part of a former military airfield that was completed in 1944 and after a short operational life was finally sold off in the 1960s. Many of the original buildings have found new uses and many new buildings most notably a large chicken litter fuelled power station, have been constructed.
- 8.2.2 The County Council will seek to work with the landowner and the District Council with a view to drawing up a development brief for the site, in accordance with the Development Plan. In safeguarding the site the County Council will rely on Policy WDM1. It is estimated that a strategic waste facility would require approximately 5 hectares of the total site, excluding access roads.
- 8.2.3 Land has been allocated within the adopted Mid Suffolk District Local Plan for industrial and commercial development although it is understood that much of this land has been secured by other development proposals. However, additional areas of land are being promoted as part of the Local Development Framework process.
- 8.2.4 The site is well located in relation to the Strategic Lorry Route Network, with a number of existing access points linking with the A140. Improvement works may be required.
- 8.2.5 The site overlies a major aquifer, is close to nearby groundwater abstractions and is within Groundwater Source Protection Zone 3. The site is also located within a Nitrate Vulnerable Zone. Precautions therefore must be taken to prevent contamination.

- 8.2.6 The County Countryside Service indicated that there are a number of Public Rights of Way that cross the site. The planning application would need to include suitable proposals to safeguard these public rights of way as agreed with the County's Countryside Service.
- 8.2.7 Defence Estates indicated that the site lies within the Old Buckenham weather radar safeguarding zone. The planning application would need to include suitable proposals to safeguard the radar as agreed with Defence Estates.
- 8.2.8 There is a high pressure gas main that crosses the site. The planning application would need to include suitable proposals to safeguard the gas main as agreed with the National Grid.
- 8.2.9 Modelling carried out by consultants suggests that air quality could be maintained above guidelines.

### **Environmental Safeguards**

- 8.2.10 The following assessments would be likely to be required as part of an Environmental Assessment in support of a planning application for a strategic residual waste treatment facility.
  - Transport Impact Assessment
  - Cultural Heritage Assessment
  - Visual Assessment
  - Air Quality Assessment
  - Noise Assessment
  - Ecological Assessment
  - Flood Risk Assessment
- 8.2.11 The above studies would, where appropriate, need to identify suitable means of mitigation so that recognised environmental standards would be met.

#### **Buffer Protection Areas**

8.2.12 To the north is located the village of Brome. To the east of the site lies the village of Eye. To the west of the site runs the A140. On the other side of A140 are

agricultural land and the village of Yaxley. To the south of the site is agricultural land and Hall Farm.

8.2.13 Location within an existing industrial area serves to reduce the potential impact of new development on the surrounding area. There is, however, scope for the use of screening plant and the subtle use of earth bunding to soften the appearance of the site, particularly from the open aspect to the south, in a similar way as the gas pumping station has been landscaped.

#### Conclusion

8.2.14 A large site that is well related to the Strategic Lorry Route Network. Landscaping would however be beneficial in softening the appearance of the development particularly to the more open southern aspect. Air quality could be maintained above guidelines.


## Site 28: Masons Quarry, Great Blakenham

Status: Area of Search Site owner: Viridor Area of site: 15.75ha Area required: approximately 5ha Potential use: strategic residual waste treatment facility

- 8.3.1 This site forms part of the former chalk and clay quarry that supplied Masons Cement Works with the primary materials it required. Part of the site is currently being landfilled and other parts of the site are occupied by a materials recycling facility and a landfill gas electricity generation facility.
- 8.3.2 The site is well located in relation to the Strategic Lorry Route Network, with access onto the A14 (T) via the B1113.
- 8.3.3 The site overlies a major aquifer, is close to nearby groundwater abstractions and is within Groundwater Source Protection Zone 3. The site is also located within a Nitrate Vulnerable Zone. Precautions therefore must be taken to prevent contamination.
- 8.3.4 Within the quarry, there is a geological SSSI which would need to be preserved and a CWS for which suitable mitigation/protection would be required. Great Crested Newts are also found within the quarry and suitable mitigation will be required.
- 8.3.5 General consideration of the potential for cumulative environmental impacts has been addressed during the site selection process. A more detailed consideration would form part of a planning application and would be informed by the Environmental Impact Assessment submitted in support of it.
- 8.3.6 The site is within the statutory birdstrike zone surrounding RAF Wattisham. The nature of Residual Waste Treatment Facilities is such that waste would be completely contained within the building and there would be no threat to aircraft

from birdstrike resulting from flocks being attracted to piles of untreated waste in the open.

- 8.3.7 The County Countryside Service indicated that there are a number of Public Rights of Way that cross the site. The planning application would need to include suitable proposals to safeguard these public rights of way as agreed with the County Countryside Service.
- 8.3.8 Modelling carried out by consultants suggests that air quality could be maintained above guidelines.

## **Environmental Safeguards**

- 8.3.9 The following assessments would be likely to be required as part of an Environmental Assessment in support of a planning application for a strategic residual waste treatment facility.
  - Transport Assessment
  - Visual Assessment
  - Air Quality Assessment
  - Noise Assessment
  - Ecological/Geological Assessment
  - Hydrogeological Assessment
  - Contaminated/site stability assessment
  - Flood Risk Assessment
- 8.3.10 The above studies would, where appropriate, need to identify suitable means of mitigation so that recognised environmental standards would be met.
- 8.3.11 An Appropriate Assessment that considers the potential for significant impacts upon ecological sites protected by European Legislation may also potentially be required in the case of a planning application for strategic Energy from Waste development at this site. Such an assessment would need to take into account the incombination effects including potentially from strategic Energy from Waste developments at the Highways Depot (Site 29) and Sproughton (Site 2).

#### **Buffer Protection Areas**

- 8.3.12 To the north of the site is agricultural land beyond which lies Great Blakenham. To the east of the site is agricultural land, a disused MOD tank farm, the B1113, beyond which lies the site of the former cement works which is proposed to be redeveloped. To the south is agricultural land, an industrial area and Little Blakenham. To the west is a current landfill area and a previously worked minerals extraction area which has been subject to interim restoration and is now subject to the Snoasis planning permission. Beyond the boundaries of the former quarry lies agricultural land.
- 8.3.13 There are already considerable buffer zones between the existing landfill and sensitive surrounding land-uses. Existing hedgerows and belts of trees are established and provide an effect screen to operations within the site. Restoration of the existing landfill and subsequent planting will provide a landscaped buffer with the proposed Snoasis development. Additional landscaping including discrete bunding could also be incorporated into proposals for a strategic facility if required.

## Conclusion

8.3.14 This site is located on the fringes of Ipswich and is also well related to the Strategic Lorry Route Network. Sensitive surrounding land-uses are already screened by existing planting but could be augmented by further planting and subtle bunding if required. Restoration of the existing landfill and subsequent planting would provide a buffer to the proposed Snoasis development. Air quality could be maintained above guidelines.



## Site 29: Suffolk County Council Highways Depot, Lodge Lane, Great Blakenham

Status: Specific Site Site owner: Suffolk County Council Area of site: 3.8ha Potential use: strategic residual waste treatment facility

- 8.4.1 This site is currently occupied by the County Highways Depot and includes offices, vehicle maintenance facilities and parking areas.
- 8.4.2 The site is well located in relation to the Strategic Lorry Route Network, with access onto the A14 (T) via the B1113. The County Highways Authority indicated that there may need to be some improvement works to Lodge Lane and its access to Bramford Road (B1113). Improvements may also be required to the main B1113 T-junction. The planning application would need to propose suitable improvements as agreed with the County Highways Authority.
- 8.4.3 General consideration of the potential for cumulative environmental impacts has been addressed during the site selection process. A more detailed consideration would form part of a planning application and would be informed by the Environmental Impact Assessment submitted in support of it.
- 8.4.4 The site overlies a major aquifer, is close to nearby groundwater abstractions and is within Groundwater Source Protection Zone 3. The site is also located within a Nitrate Vulnerable Zone. Precautions therefore must be taken to prevent contamination.
- 8.4.5 The meadows surrounding the River Gipping are designated as a Special Landscape Area and a well-designed development should detract as little as possible from the landscape character of the area.
- 8.4.6 Modelling carried out by consultants suggests that air quality could be maintained above guidelines.

## **Environmental Safeguards**

- 8.4.7 The following assessments would be likely to be required as part of an Environmental Assessment in support of a planning application for a strategic residual waste treatment facility.
  - Transport Assessment
  - Visual Assessment
  - Air Quality Assessment
  - Noise Assessment
  - Ecological/Geological Assessment
  - Flood Risk Assessment
- 8.4.8 The above studies would, where appropriate, need to identify suitable means of mitigation so that recognised environmental standards would be met.
- 8.4.9 An Appropriate Assessment that considers the potential for significant impacts upon ecological sites protected by European Legislation may also be required in the case of a planning application for a strategic Energy from Waste development at this site. Such an assessment would potentially need to take into account in-combination affects including with other strategic Energy from Waste developments at Masons Quarry (Site 28) and Sproughton (Site 2).

#### **Buffer Protection Areas**

- 8.4.10 To the north of the site is an existing industrial development, a row of houses and then the former cement works site, which has planning permission for residential development. To the east lies the Norwich to London Liverpool Street mainline, meadows through which the River Gipping flows and beyond that the A14 (T). To the south lies the B1113 and beyond meadows and a business centre and housing. To the west lies the B1113, then agricultural land and beyond that a large distribution warehouse.
- 8.4.11 The site is surrounded on two sides by public highways, on the third side by a railway and on the fourth by industrial development. The B1113 to the south of the

site is on an embankment and there are established trees on the boundary of the site except where it abuts the industrial area to the north. Enhancement of the boundary appearance of the site could be achieved with further planting and new fencing.

## Conclusion

8.4.12 A compact site on the fringes of Ipswich that is also well related to the Strategic Lorry Route Network. Enhanced boundary treatment of the site and sensitive design of a new waste facility would improve the appearance of the site from surrounding areas. Air quality could be maintained above guidelines.





# **Chapter 9: Sites Allocated For Non Hazardous Landfill**

Site	Site name	Parish Council	District/Borough Council	Grid Ref
W7	Layham Landfill Site	Layham	Babergh DC	TM010398
67	Thorington	Thorington	Suffolk Coastal DC	TM422727
W17	Foxhall Landfill Site	Foxhall	Suffolk Coastal DC	TM243438
W11	Masons Landfill Site	Great Blakenham	Mid Suffolk	TM115502

**N.B.** Assumed conversion rate of 1 tonne to 1 cubic metre in situ.

## Site W7: Layham Landfill Site

Status: Specific Site Site owner: Brett Aggregates Area: 23.19ha Potential use: strategic non-hazardous landfill Potential additional void: not applicable but would involve broadening the range of wastes to include residual materials from the processing of municipal solid waste.

- 9.1.1 This site has planning permission, under consent reference B/97/0765, for the landfilling of inert, industrial and commercial waste until 2013. A planning condition prevents the disposal of dedicated household waste streams on site. The site also accommodates a minerals processing area which serves sand and gravel extraction currently taking place to the southeast.
- 9.1.2 Access to the Suffolk Lorry Route Network is via a re-routed and improved road to the A1071 which is a Zone Distributor Lorry Route.
- 9.1.3 .Suitable proposals would need to be included as part of a planning application to safeguard wildlife in consultation with the Suffolk Wildlife Trust and English Nature.
- 9.1.4 The site overlies a major aquifer. The planning application would need to include a risk based assessment containing suitable proposals to safeguard the aquifer as agreed with the Environment Agency.
- 9.1.5 The site is within the statutory birdstrike zone surrounding RAF Wattisham. The planning application would need to include suitable proposals to discourage birds in agreement with Defence Estates.
- 9.1.6 The site is crossed by high voltage overhead powerlines. The planning application would need to include suitable proposals to safeguard the powerlines in agreement with the National Grid.

## **Environmental Safeguards**

- 9.1.7 The following assessments would be likely to be required as part of an Environmental Assessment in support of a planning application for a strategic non-hazardous landfill.
  - Transport Impact Assessment
  - Visual Assessment
  - Air Quality Assessment
  - Noise Assessment
  - Ecological/Geological Assessment
  - Hydrogeological Assessment
  - Flood Risk Assessment
- 9.1.8 The above studies would, where appropriate, need to identify suitable means of mitigation so that recognised environmental standards would be met.

#### **Buffer Protection Areas**

- 9.1.9 To the north of the site are agricultural land, woodland and isolated properties in the vicinity of Rands Farm. To the east are agricultural land, woodland and isolated properties in the vicinity of Overbury Hall. To the south are agricultural land, mineral extraction areas and Ivy Tree Farm. To the west are agricultural land and beyond that Polstead Heath.
- 9.1.10 There are already considerable buffer zones between the existing landfill and sensitive surrounding land-uses. Existing hedgerows and belts of trees are established and provide an effect screen to operations within the site. Additional landscaping could also be incorporated into proposals if required.

#### Conclusion

9.1.11 A well screened and established site that potentially could cater for a wider range of wastes.



## Site 67: Thorington

Status: Specific Site Site owner: Waste Recycling Group Area: 26.22ha Potential use: strategic non-hazardous landfill Potential additional void: 1,000,000 cubic metres

- 9.2.1 There is an existing void created by sand and gravel extraction which ceased in 2004.
- 9.2.2 The site is well located in relation to the Strategic Lorry Route Network with a purpose-designed junction directly connecting to the A12.
- 9.2.3 There is a need for an Appropriate Assessment in the light of the potential impact on nearby Natura 2000 sites from Crows and Gulls attracted to the proposed site.
- 9.2.4 Translocation of Great Crested Newts needs to be undertaken under licence so that the restoration provisions of the existing minerals extraction planning permission can be complied with.
- 9.2.5 It is acknowledged that there is potential to create valuable habitat as part of the restoration of the site. Such proposals would be encouraged as part of the details proposals contained in the planning application
- 9.2.6 Footpath FP 9 runs within the northern end, of the western boundary. This footpath must be adequately safeguarded during the operational life of the site.
- 9.2.7 The site overlies a major aquifer. The planning application would need to include a risk based assessment containing suitable proposals to safeguard the aquifer as agreed with the Environment Agency.

## **Environmental Safeguards**

- 9.2.8 The following assessments would be likely to be required as part of an Environmental Assessment in support of a planning application for a strategic non-hazardous landfill.
  - Transport Impact Assessment
  - Visual Assessment
  - Air Quality Assessment
  - Noise Assessment
  - Ecological/Geological Assessment
  - Hydrogeological Assessment
  - Flood Risk Assessment
- 9.2.9 The above studies would, where appropriate, need to identify suitable means of mitigation so that recognised environmental standards would be met.

#### **Buffer Protection Areas**

- 9.2.10 To the north of the site are agricultural land and Thorington Hall and Thorington Hall Farm. To the east are agricultural land and the A12. To the south is the A12 and beyond that agricultural land. To the west is agricultural land and Peacock Farm.
- 9.2.11 There are already considerable buffer zones between the existing landfill and sensitive surrounding land-uses. Existing hedgerows and belts of trees are established and provide an effect screen to operations within the site. Additional landscaping could also be incorporated into proposals if required.

#### Conclusion

9.2.12 A well screened and established site that potentially could provide a strategic nonhazardous landfill site.



#### Site W17: Foxhall Landfill Site

Site owner: Viridor Area: 30.57ha Potential use: strategic non-hazardous landfill Potential additional void: 400,000 cubic metres

#### Overview

- 9.3.1 This site already has planning permission for the landfilling of putrescible waste until March 2019, with restoration to parkland by March 2021.
- 9.3.2 The site is well located in relation to the Strategic Lorry Route Network via Foxhall Road onto the A12.
- 9.3.3 The Environment Agency has commented that any additional void space would need to comply with the Landfill Directive.
- 9.3.4 Footpaths Foxhall 16, 18, 36, 52 and Brightwell 4A are affected by this proposal. These footpaths must be adequately safeguarded during the operational life of the site.
- 9.3.5 Ipswich Heaths Site of Special Scientific Interest, Newbourne Springs Site of Special Scientific Interest and Mill River County Wildlife Site need to be adequately safeguarded. Detailed proposal submitted as part of the planning application will need to address the safeguarding of these features.
- 9.3.6 The existing planning permission for the site includes restoration to a Country Park for public access. Consideration should also be given to the creation of areas of heathland and acid grassland.

#### **Environmental Safeguards**

9.3.7 The following assessments would be likely to be required as part of an Environmental Assessment in support of a planning application for a strategic nonhazardous landfill site.

- Transport Impact Assessment
- Visual Assessment
- Air Quality Assessment
- Noise Assessment
- Ecological/Geological Assessment
- Hydrogeological Assessment
- Flood Risk Assessment
- 9.3.8 The above studies would, where appropriate, need to identify suitable means of mitigation so that recognised environmental standards would be met.

## **Buffer Protection Areas**

- 9.3.9 To the north of the site are Foxhall Road, agricultural land and beyond that Martlesham. To the east are the A12, agricultural land and isolated dwellings. To the south are river valley, agricultural land and a Special Landscape Area. To the west are woodland and a restored landfill area.
- 9.3.10 There are already considerable buffer zones between the existing landfill and sensitive surrounding land-uses. Existing hedgerows and belts of trees are established and provide an effective screen to operations within the site. Additional landscaping could also be incorporated into proposals if required.

## Conclusion

9.3.11 A well-established site that potentially could provide additional strategic nonhazardous landfill capacity.



## Site W11: Masons Landfill Site

Status: Specific Sites Site owner: Viridor Area: 73.93ha Potential use: strategic non-hazardous landfill Potential additional void: 1,300,000 cubic metres

- 9.4.1 This sites forms part of the former chalk and clay quarry that supplied the former Masons Cement Works with the primary materials it required. The site is currently being landfilled and includes a materials recycling facility and a landfill gas, electricity generation facility.
- 9.4.2 The site is well located in relation to the Strategic Lorry Route Network, with access onto the A14 via the B1113.
- 9.4.3 The site overlies a major aquifer, is close to nearby groundwater abstractions and is within Groundwater Source Protection Zone 3. The site is also located within a Nitrate Vulnerable Zone. Precautions therefore must be taken to prevent contamination.
- 9.4.4 Nature conservation interests including Gt Blakenham Pit SSSI & CWS, Column Field Upper Quarry CWS and Great Crested Newts need to be adequately safeguarded. Detailed proposal submitted as part of the planning application will need to address the safeguarding of these features.
- 9.4.5 The Highways Agency highlighted potential congestion at the B1113/A14 Junction. The planning application would be subject to a Transport Impact Assessment that would assess the likely impact.
- 9.4.6 The site is within the statutory birdstrike zone surrounding RAF Wattisham. The planning application would need to include suitable proposals to discourage birds in agreement with Defence Estates.

9.4.7 General consideration of the potential for cumulative environmental impacts has been addressed during the site selection process. A more detailed consideration would form part of a planning application and would be informed by the Environmental Impact Assessment submitted in support of it.

## Environmental Safeguards

- 9.4.8 The following assessments would be likely to be required as part of an Environmental Assessment in support of a planning application for a strategic non-hazardous landfill.
  - Transport Impact Assessment
  - Visual Assessment
  - Air Quality Assessment
  - Noise Assessment
  - Ecological/Geological Assessment
  - Hydrogeological Assessment
  - Flood Risk Assessment
- 9.4.9 The above studies would, where appropriate, need to identify suitable means of mitigation so that recognised environmental standards would be met.

#### **Buffer Protection Areas**

- 9.4.10 To the north of the site is agricultural land beyond which lies Great Blakenham. To the east of the site is agricultural land, a disused MOD tank farm, the B1113, beyond which lies the site of the former cement works which is proposed to be re-developed. To the south are agricultural land, an industrial area and Little Blakenham. To the west is a previously worked minerals extraction area which has been subject to interim restoration and is now subject to the Snoasis planning application. Beyond the boundaries of the former quarry lies agricultural land.
- 9.4.11 There are already considerable buffer zones between the existing landfill and sensitive surrounding land-uses. Existing hedgerows and belts of trees are established and provide

an effect screen to operations within the site. Additional landscaping could also be incorporated into proposals if required.

## Conclusion

9.4.12 A well-established and screened site that potentially could provide strategic non-hazardous landfill capacity.







## Appendix 1: Map of Waste Management Facilities in Suffolk and within 5km of Boundary

# Key to Waste Management Facilities in Suffolk and within 5km of boundary

		Inert Landfills			
Ref	Site Name	Operator Name	Grie	d Ref	
Rei	Site Name	Operator Name	Easting	Northing	
1	Barham Pit	Brett Aggregates Ltd	613500	251500	
2	Darmsden Hall	Lafarge Aggregates Ltd	609500	252700	
3	Somersham Road	Swift Recycling Ltd	611100	248200	
4	Shrubland Park	Brett Aggregates Ltd	612000	253700	
5	Ticehurst Farm	Ticehurst Gravels	595500	262500	
6	The Folly	TJ and WM Cardy	685700	271700	
7	Broom Hill, Nacton	Cemex UK Materials Ltd	619900	240700	
8	Brundon Lane Landfill	Danbury Haulage Ltd	586300	241700	
9	Sheepdrift Farm	Brett Aggregates Ltd	626000	244800	
10	Henham Park	S Grundon (Ewelme) Ltd	645300	278900	
11	Worlington Landfill	M Dickerson Ltd	569991	273083	

	Non-Hazardous Landfills				
Ref	Site Name	Operator Name	Gric	l Ref	
Kei	Site Name		Easting	Northing	
12	Folly Farm	Shotley Holdings Ltd	612500	236500	
13	Bramford Quarry	Biffa Waste Services Ltd	612900	248100	
14	Fornham Park Landfill	Waste Recycling Group Ltd	584200	268500	
15	Foxhall Quarry	Viridor Waste Management Ltd	624100	243700	
16	Masons Quarry	Viridor Waste Management Ltd	611200	250000	
17	Layham Quarry	Brett Aggregates Ltd	601000	240000	
18	Wangford Landfill Site	Viridor Waste Management Ltd	646800	277800	

	Incinerators with energy recovery				
Pof	Ref Site Name	Operator Name	Grid Ref		
Rei		Operator Name	Easting	Northing	
19	Ipswich Hospital	White Rose Environmental Ltd	619300	245000	
20	Eye Power Plant	EPR Eye Ltd	612448	275979	

	Incinerators without energy recovery				
Ref	Site Name	Operator Name	Gric	l Ref	
IVEI	Site Maille		Easting	Northing	
21	Lower Farm	WJ Phizacklea	577200	263200	
22	Hunt Kennels	The Essex and Suffolk Hunt	602400	241400	
23	Sizewell A Nuclear Power Station	BNFL Magnox Generation Ltd	647300	263200	
24	White House Farm Kennels	AE & HD Pearce	613900	235800	
25	Sizewell B Nuclear Power Station	British Energy Generation Ltd	647300	263200	
26	Earl Stonham Incinerator	Horse Plus Ltd	611300	259300	

	Composting Facilites				
Ref	Site Name	Operator Name	Grid	Ref	
Kei	Site Name		Easting	Northing	
27	Foxhall Quarry	Viridor Waste Management Ltd	624100	243700	
28	Lackford Landfill	County Mulch Ltd	579700	269500	
29	Wangford Landfill Site	Viridor Waste Management Ltd	646800	277800	
30	Ipswich Composting Facility	Anglian Water Services Ltd	617200	241800	
31	The Watering Farm	County Mulch Ltd	608800	256400	
32	Stanton Mushroom Compost Production Plant	County Mulch Ltd	599000	273500	
33	Parham Recycling Centre	Bioganix Ltd	631700	260100	

	Household Wa	aste & Recycling Centre		
Ref	Site Name	Operator Name	Grid	Ref
Rei	Site Name		Easting	Northing
34	Beccles HWRC	WRG limited	642500	291200
35	Bramford HWRC	WRG limited	611200	246500
36	Brome HWRC	WRG limited	613600	275900
37	Bury St Edmunds HWRC	WRG limited	586700	263400
38	Chelmondiston HWRC	WRG limited	621600	236900
39	Felixstowe HWRC	WRG limited	628600	232900
40	Foxhall HWRC	WRG limited	624100	243700
41	Hadleigh HWRC	WRG limited	603100	243700
42	Haverhill HWRC	WRG limited	568200	244800
43	Ingham HWRC	WRG limited	585600	271300
44	Ipswich HWRC	WRG limited	615300	244200
45	Leiston HWRC	WRG limited	545500	263400
46	Lowestoft HWRC	WRG limited	655400	293500
47	Mildenhall HWRC	WRG limited	573000	275000
48	Newmarket HWRC	WRG limited	563500	264700
49	Southwold HWRC	WRG limited	649800	276500
50	Stowmarket HWRC	WRG limited	604300	259900
51	Sudbury HWRC	WRG limited	585900	240500

	Materials Reclamation Facilites				
Bof	Ref Site Name	Operator Name	Grid Ref		
Rei			Easting	Northing	
52	Masons Quarry	Viridor Waste Management Ltd	611200	250000	
53	Hall Heath, Lackford	Viridor Waste Management Ltd	579700	269500	

	Waste Transfer Facility				
Ref	Site Name	Operator Name	Grid R   Easting   578300   612500   644000   652400   566500   644200   566500   644200   566500   644200   596400   652600   652600   617600   613300   652600   582400   5382400   613300   652600   5582400   613300   613300   652600   652800   652800   586300   614329   610780	Ref	
Rei	Site Name	Operator Name	Easting	Northing	
54	Barrow	Mr RG Housden	578300	265900	
55	Folly Farm	Shotley Holdings Ltd	612500	236500	
56	Ellough Airfield	V C Cooke Ltd	644000	288500	
57	Gisleham Brick and Pipe Works	EE Green and Son	652400	288500	
58	Homefield Business Park Transfer Station	Waste Recycling Group Ltd	566500	244300	
59	Skipaway Waste Transfer Station	Skipaway	644200	262700	
60	Collins Skip Hire Waste Transfer Station	Shotley Holdings Ltd	54400	262800	
61	Harpers Hill Farm	T D & A M Bugg Ltd	596400	234900	
62	Red Willows Transfer Station	Stowmarket Skip Hire	602920	258630	
63	Haddenham Road Transfer Station	Waste Recycling Group Ltd	652600	289400	
64	Property Care Glemsford	Property Care	582400	248100	
65	Cook Transfer Station	PC and TN Cook	617600	241800	
66	Binder Pollution Control	Binder Pollution Control Ltd	613300	249400	
67	Safety Kleen	Safety Kleen UK Ltd	600200	264900	
68	CR Hales Transfer Station	CR Hales	652600	289700	
69	P Waters Transfer Station	P W Waters Ltd	652800	293600	
70	Balloon Barn Farm	Culford Waste Limited	584100	272100	
71	Hollow Road Farm	Shotley Holdings Ltd	586300	266200	
72	Railway Sidings	S. Sacker (Claydon) Ltd	614329	249214	
73	AWS Transfer Station	Blue Star Skips Ltd	610780	250615	
74	Anson Way WTS	B & B Skip Hire Ltd	645790	288840	
75	Eye WTS	Mr J Wilby	614139	274313	
76	Great Waldingfield WTS	Miniwaste (RJ & L King)	589465	244304	
77	Old Chicory Factory Tyre Recycling Centre	Murfitts Industries Ltd	575295	286101	
78	Debtrac Centre	S. Sacker (Claydon) Ltd	609293	254108	
79	Stowmarket Business Park Waste Transfer Station	Stowmarket Skip Hire	605422	256569	

	Secor	ndary Aggregates			
Ref	Site Name	Operator Name	Grid	Grid Ref	
Kei	Site Name		Easting	Northing	
80	Sinks Pit	Cemex UK Materials Ltd	621498	245495	
81	Flixton Quarry (site A)	Cemex UK Materials Ltd	629800	286500	
82	Broomfield Pit	Lafarge Aggregates Ltd	612200	251500	
83	Shrubland Park	Brett Aggregates Ltd	612000	253700	
84	The Folly	TJ and WM Cardy	685700	271700	
85	Harpers Hill Farm	T D & A M Bugg Ltd	596400	234900	
86	Sheepdrift Farm	Brett Aggregates Ltd	626000	244800	
87	Chilton Airfield	T & K Weavers Demolition	590061	241922	
88	Gazeley Secondary Aggregate Production	Lafarge Aggregates Ltd	571842	267524	
89	Chilton Grove Works	Wiles Contractors Limited	587917	243351	
90	Fornham Park	Allen Newport Ltd	583630	266453	
91	Gisleham Brick and Pipe Works	EE Green and Son	652400	288500	
92	Wenhaston	RE Desborough	639360	275979	
93	Flixton Quarry (site A)	Lafarge Aggregates Ltd	629800	286500	
94	Causeway Tip	Sutton Services Ltd	570700	282200	
95	Marstons Quarry	Middleton Aggregates	575925	271485	
96	Malting Farm	HF and JT Few	611257	251806	
97	Bay Farm Quarry	M Dickerson Ltd	568507	274431	
98	Valley Farm Pit	Sutton Services Ltd	611376	243709	
99	Somersham Road	Swift Recycling Ltd	611100	248200	

	Metals/End	l of life Vehicles (ELV)		
Ref	Site Name	Operator Name	Grid	Ref
Rei	Site Name	Operator Name	Easting	Northing
100	Bala Auto Dismantlers	M. A. Noor	568900	278100
101	CR Hales Car Breaker	CR Hales	652600	289700
102	FACF Brinkley	Mr F A & Mr C F Brinkley	596253	253354
103	F. A. Edwards & Son Ltd	F A Edwards, D Edwards And J Edwards	618200	272600
104	F J Metals	F J Metals	612567	245733
105	Gowing Auto Salvage	Gowing Auto Salvage	578986	266810
106	Lowestoft Vehicle Dismantlers	J. H. Pendle	650791	288244
107	Paper Mill Lane	Whip Street Motors Ltd	611733	247162
108	Railway Sidings	S. Sacker (Claydon) Ltd	612209	252759
109	SBS Spares	S B S Spares Ltd	609709	242944
110	Sole Bay Car Spares	G. L. Murray	649124	276932
111	DJ Spall	D. J. Spall Recycling Ltd	625546	255140
112	Springfield Autos Ltd	Springfield Autos Ltd	593038	237755
113	V Cracknell & Son	V Cracknell & Son	603993	258594
114	Whip St Motors	Whip St Motors	616020	244185
115	S. Scott & Son Ltd	S. Scott & Son Ltd	590656	271454
116	M. C. Webb & Son Ltd	M. C. Webb & Son Ltd	561363	265500
117	J. P. Barker & Sons	J. P. Barker & Sons	584226	264428
118	Doe Metal Recycling Ltd	Doe Metal Recycling Ltd	653292	291340
119	Scrapco	Scrapco	570413	269668
120	Shaddock & Co. Ltd	Shaddock & Co. Ltd	586726	241446
121	Lowestoft Scrap Metal Ltd	Lowestoft Scrap Metal Ltd	649958	289554
122	Vehicle Dismantlers	Vehicle Dismantlers	571961	269192
123	J. B. Motors	J. B. Motors	642217	265381
124	Park Wood Autos	Gatesby Ltd	606017	246805

	Anglian Water Sewage Treatment Works				
Def			Grid	Ref	
Ref	Site Name	Operator Name	Easting	Northing	
125	Shalford Meadow, Little Cornard	Anglian Water	588082	239134	
126	Yarmouth Road, Corton	Anglian Water	650214	300261	
127	Wamil Road, Mildenhall	Anglian Water	570032	274522	
128	Chalkstone Way, Haverhill	Anglian Water	568138	244853	
129	Blyth Road, Southwold	Anglian Water	650384	276615	
130	Walton Avenue, Felixstowe	Anglian Water	629016	233591	
131	Fornham Park, Fornham St Genevieve	Anglian Water	584199	268897	
132	Off Caveham Road, Tuddenham	Anglian Water	573997	271308	
133	Sharper's Corner, Lakenheath	Anglian Water	570672	283250	
134	Hepworth Road, Stanton	Anglian Water	596910	273588	
135	South of Icklingham Road, West Stow	Anglian Water	581357	270468	
136	South of Hopton Road, Coney Weston	Anglian Water	585622	263945	
137	Fordham Road, Newmarket	Anglian Water	563293	267078	
138	Church Road, Brandon	Anglian Water	577750	286273	
139	Walsham Road, Badwell Ash	Anglian Water	601241	268240	
140	Off Mill Lane, Thurston	Anglian Water	591956	266564	
141	Kiln Lane, Elmswell	Anglian Water	598429	262749	
142	Creek Farm, Woodbridge	Anglian Water	626159	247477	
143	Cliff Quay, Ipswich	Anglian Water	617679	241909	
144	The Lows, Palgrave	Anglian Water	611621	278741	
145	Marsh Lane, Worlingham	Anglian Water	644772	290575	
146	Ashtree Farm, Worlingham	Anglian Water	645151	289530	
147	Hillside Road East, Bungay	Anglian Water	634528	289102	
148	West of Beach Caravan Site, Kessingland	Anglian Water	653403	285948	
149	Off Bramfield Road, Halesworth	Anglian Water	639117	276892	
150	Kettleburgh Road, Framlingham	Anglian Water	628210	262062	
151	Melton Hill, Woodbridge	Anglian Water	627751	249587	
152	East of Spring Lane, Wickham Market	Anglian Water	630566	256123	
153	Valley Road, Leiston	Anglian Water	644527	262935	
154	Off Hoxne Road, Eye	Anglian Water	615352	273889	
155	Creeting Road, Stowmarket	Anglian Water	605314	258845	
156	Off the Ipswich-Norwich Road, Mendlesham	Anglian Water	611772	266996	
157	West of Fishponds Way, Haughley	Anglian Water	602928	261936	
158	North of the River Deben, Debenham	Anglian Water	619432	262149	
159	North West of Coddenham Road, Creeting St Mary	Anglian Water	610834	254721	
160	Bobbits Lane, Wherstead	Anglian Water	614915	241375	
161	Capel St Mary	Anglian Water	608583	237913	
162	Marsh Farm, Brantham	Anglian Water	610492	233906	
163	Hyams Lane, Holbrook	Anglian Water	616753	236151	
164	Burndon Lane, Sudbury	Anglian Water	586198	241185	
165	Arms Lane, Kedington	Anglian Water	570605	246413	
166	South of Cavendish Road, Clare	Anglian Water	577827	245514	
167	Flatford Road, East Bergholt	Anglian Water	607388	233778	
168	Long Melford	Anglian Water	586889	245150	
169	Brent Eleigh Road, Lavenham	Anglian Water	592373	248411	
170	Great Waldringfield	Anglian Water	591340	242900	
171	Low Street, Glemsford	Anglian Water	583520	249008	
172	South of River Brett, Hadleigh	Anglian Water	602812	242140	
173	Off B1087 Road, Stoke By Nayland	Anglian Water	599063	237408	

## **Appendix 2: Glossary**

Anaerobic Digestion A process where biodegradable material is encouraged to break down in the absence of oxygen. Changes the nature and volume of material and produces a gas from which energy can be recovered

**Area of Outstanding Natural Beauty (AONB)** An area of particular natural beauty to be preserved and enhanced. Designated by the Countryside Commission under Section 87 of the National Parks and Access to the Countryside Act 1949.

#### **Becquerel (Bq)**

The standard international unit of radioactivity equal to one radioactive transformation per second.

**Biodegradable waste** Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food and garden waste, and paper and cardboard.

**Biosolid** The solid residue produced as a result of sewage treatment (also known as sewage sludge)

**Brownfield Land Previously** developed land that is or was occupied by a permanent structure, including the curtilage of the development land and any associated fixed surface infrastructure.

The definition includes defence buildings, but excludes:

- Land that is or has been occupied by agricultural of forestry buildings.
- Land that has been developed for minerals extraction or waste disposal by landfill purposes where provision for restoration has been made through development control procedures and
- Land in built-up areas such as parks, recreation grounds and allotments, which although it may feature paths, pavilions and other buildings, has not been previously developed.
- Land that has been previously developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape in the process of time (to the extent that it can reasonably be considered as part of the natural surroundings).

**Cap** Completed landfill sites are generally "capped" with a layer of impermeable material such as clay, to prevent water and gas from escaping.

**Combined Heat and Power (CHP):** The generation of electrical power and usable heat from a combustion process. CHP is more efficient than conventional power generation.

**Conservation Area** An area of special architectural or historic interest to be preserved or enhanced. Designated by a local authority.

**Controlled Waste** The UK term for wastes controlled under the Waste Framework Directive: any household, industrial or commercial waste

County Wildlife Site A locally-designated wildlife habitat

**Cover** Inert waste material brought onto landfill sites for engineering purposes to cover layers of fill on site and to protect amenity.

**Composting** An aerobic, biological process in which organic wastes, such as garden and kitchen waste are converted into a stable granular material which can be applied to land to improve soil structure and enrich the nutrient content of the soil

**Energy from Waste (EfW)** A residual waste treatment facility where energy is generated either from direct combustion or from by products derived from the process such as biogas or Refuse Derived Fuel (RDF)

**Environment Agency** A government agency intended to promote a more integrated approach to waste management and consistency in waste regulation. Also conducts national surveys of waste arisings and waste facilities.

**Exempt Sites** Sites that have been agreed by the Environment Agency not to require a waste management licence because of the nature and purpose of the site and the volume of waste deposited.

**Gasification** A technology related to incineration where waste is heated in the presence of air to produce fuel rich gases.

**High Level Waste (HLW)** Radioactive wastes in which the temperature may rise significantly as a result of their radioactivity, so this factor has to be taken into account in the design of storage or disposal facilities.

**Household Waste** This includes waste from household collection rounds, waste from services such as street sweeping, bulky waste collection, litter collection, hazardous household waste collection and separate garden waste collection, waste from household waste recycling centres and wastes separately collected for recycling or composting through bring or drop off schemes.

**Household Waste Recycling Centres** Sites provided by waste disposal authorities where residents can deposit household waste free of charge. (Formerly known as civic amenity sites.)

**Incineration** The controlled burning of waste to reduce its volume or toxicity. Often energy can be recovered from wastes burnt in this manner.

**Intermediate level waste (ILW)** Radioactive wastes exceeding the upper activity boundaries for LLW but which do not need heat to be taken into account in the design of storage or disposal facilities.

Landfill sites Areas of land in which waste is deposited. Often located in disused quarries.

Landraise sites Controlled areas of land on which waste is deposited at least partially above ground levels.

**Local Nature Reserve** An area of particular wildlife interest declared by a local authority under Section 21 of the National Parks and Access to the Countryside Act 1949, and usually managed by them.

Low Level Waste (LLW) Includes metals, soil, building rubble and organic materials, which arise principally as lightly contaminated miscellaneous scrap. Metals are mostly in the form of redundant equipment. Organic materials are mainly in the form of paper towels, clothing and laboratory equipment that have been used in areas where radioactive materials are used – such as hospitals, research establishments and industry. LLW contains radioactive materials other than those acceptable for disposal with municipal and general commercial or industrial waste. It is now defined as "radioactive waste having a radioactive content not exceeding four gigabecquerels per tonne (GBq/te) of alpha or 12 GBq/te of beta/gamma radioactivity".

**Materials Recovery Facility** A sorting facility where recyclable materials can be separated from other wastes before being sent for reprocessing or disposal.

**Municipal Waste** Household waste (see above) plus any commercial waste collected by Waste Collection Authorities and waste resulting from the clearance of fly-tipped materials.

**National Nature Reserve** A nationally important area of special nature conservation interest, designated by English Nature under Section 16 of the National Parks and Access to the Countryside Act 1949.

**Parks and Gardens** Sites included by English Heritage on the Register of Gardens and other land of special historic interest, under the National Heritage Act 1983.

**Pyrolysis** A technology related to incineration where waste is heated in the absence of air to produce gas and liquid fuel plus solid waste.

**RAMSAR Site** Internationally important wetland identified for conservation under the Ramsar convention (1971).

**Recovery** To transform material by extracting value from it through reprocessing the waste.

**Residual Waste Treatment Facility (RWTF)** Facilities for dealing with waste which has not been re-used, recycled or composted. The Waste Core Strategy is technology neutral, although there are two commonly found forms of residual waste treatment. Energy from Waste which is also known

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as EfW (incineration with electricity generation and use of the waste heat in buildings) and Mechanical and Biological Treatment which is also known as MBT (mechanical separation of recyclable materials followed by composting of the remaining material to produce a fuel or stabilised waste for landfilling). RWTF are defined as "strategic" within the Waste Core Strategy if they have a capacity of 100,000 tonnes or more per annum.

**Recycling** To reprocess waste materials in a production process for the original purpose or for other purposes, including composting but excluding energy recovery.

**Residual waste** Waste left after re use, recycling and composting and which may either be treated in a residual waste treatment facility or be landfilled.

**Resource Parks** A site comprising a variety of waste treatment and processing facilities to allow for synergy between those facilities at a common location.

Sewage Waste matter that is transported from properties in drains.

Sewerage The drainage and treatment infrastructure for sewage.

**Site of Special Scientific Interest** Site notified by English Nature under Section 25 of the Wildlife and Countryside Act 1981 as having special wildlife or geological features worthy of protection.

**Special Area of Conservation** Site of international importance for nature conservation, classified under the EU Habitats Directive.

**Special Landscape Area** Area of countryside designated by local authorities to provide protection from unsuitable development, but of lesser importance than the nationally designated Areas of Outstanding Natural Beauty

**Special Protection Area** An area of international importance for the conservation of wild birds, classified under the EC Conservation of Wild Birds Directive.

Thermal Treatment Generic term encompassing incineration, gasification and pyrolysis

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**Very low level waste (VLLW)** Covers waste with very low concentrations of radioactivity. It arises from a variety of sources, including hospitals and the wider non-nuclear industry. Because VLLW contains little total radioactivity, it has been safely treated by various means, such as disposal with municipal and general commercial and industrial waste directly at landfill sites or indirectly after incineration. Its formal definition is: (a) **in the case of low volumes ('dustbin loads') of VLLW** "Radioactive waste which can be safely disposed of to an **unspecified** destination with municipal, commercial or industrial waste ("dustbin" disposal), each 0.1m3 of waste containing less than 400 kilobecquerels (kBq) of total activity or single items containing less than 40 kBq of total activity.

For wastes containing carbon-14 or hydrogen-3 (tritium):

• in each 0.1m3, the activity limit is 4,000 kBq for carbon-14 and hydrogen-3 (tritium) taken together; and

• for any single item, the activity limit is 400 kBq for carbon-14 and hydrogen-3 (tritium) taken together.

Controls on disposal of this material, after removal from the premises where the wastes arose, are not necessary."

**Or** (b) **in the case of high volumes of VLLW** "Radioactive waste with maximum concentrations of four megabecquerels per tonne (MBq/te) of total activity which can be disposed of to *specified* landfill sites. For waste containing hydrogen-3 (tritium), the concentration limit for tritium is 40MBq/te. Controls on disposal of this material, after removal from the premises where the wastes arose, will be necessary in a manner specified by the environmental regulators".

Voidspace Area within landfill or landraising sites that is available to receive waste

**Waste Hierarchy** A theoretical framework which acts as a guide to the waste management options which should be considered when assessing the BPEO. The hierarchy defined in the National Waste Strategy is Reduction, Re-use, Recovery (recycling, composting, energy), and Disposal. The Government does not expect incineration with energy recovery to be considered before the options for recycling and composting have been explored.

#### Waste Water Treatment Facility

Another name for sewage treatment works

# Appendix 3: Site Selection Criteria for Residual Waste Treatment facilities

PHYSICAL		
Issue	Criterion	Comment
Size	> 2.5 Hectare	All proposals will need to demonstrate that they can be satisfactorily accommodated on site, and in particular demonstrate that vehicles can manoeuvre satisfactorily and that sufficient land is available for any required mitigation measures such as planting and landscaping.
Current use of land	Sites that are <b>vacant or derelict</b> will be assessed first	Sites <b>currently in use</b> within the land uses referred to in "land allocation" issue below will be considered where a viable proposal is promoted by the existing land user or their agent in response to the WPA's "call for sites".
Flooding potential	Sites should be in Flood Zone 1 as defined in PPS25.	Proposals for sites that fall outside Zone 1 shall demonstrate that they have been subjected to the Sequential Test set out in PPS25 and if sites in Zones 2 or 3 are proposed then they will need to be justified by reference to the Exceptions Test in the PPS. Where flood protection or other mitigation measures are in existence these may be taken into consideration in assessing whether a site meets this criterion
ACCESS	1	1
Access for Bulk Transfer, HGVs or Refuse Collection Vehicles	The direct access to the site shall be suitable for use by Bulk Transfer vehicle HGVs and Refuse Collection Vehicles	The access to the highway will need to meet the appropriate current access standards for commercial or industrial premises.

LOCATION	
Land allocation	Land should be in existing General
	Industrial use (B2) or in Storage or
	Distribution use (B8) or be
	allocated for such uses in a Local
	Plan or Local Development
	Framework or be considered
	suitable for such uses
	suitable for such uses
Strategic Lorry Route	Sites to be within 3 miles of
Network	Strategic Lorry Route Network
Relationship to Urban	Sites should be well related to
Centres	urban centres
Impact on sites of	Site is not located in AONB or The
national landscape	Broads
importance	bioads
Importance	
Impact on sites of	Site does not affect directly or
national biodiversity	indirectly a SAC, SPA or SSSI
importance	
Impact on Sites of	Site does not affect a site of
national	
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archaeological	importance or adversely affect its
importance	setting

#### COMPARATIVE OR SUBJECTIVE CRITERIA

#### GENERAL

lssue	Criterion	Comment
Rail Freight Shipping	Opportunities for handling waste transported by rail or water will be given favourable consideration.	
Compatibility with Neighbouring land use	Environmental impact to be considered	
Traffic Movements	Preference will be given to sites where traffic movements and haulage routes from waste collection activities to strategic waste management facilities are minimised	Includes data to assess opportunities for minimising distances travelled by waste from source to Residual Waste Transfer Facility.
Landscape	Based on Individual site assessment	4km, 2km, 1km and 25m radius
Biodiversity geodiversity	Based on Individual site assessment	4km, 2km, 1km and 25m radius
Noise	Numbers of noise sensitive properties within specified distance bands	Up to 50m, 50-100m, 100-150m, 150-200m, 200-300m, 300-600m
Air Quality	Numbers of sensitive properties within specified distance bands	Up to 50m, 50-100m, 100-150m, 150-200m, 200-300m, 300- 500m, 500-1000m
Visual impact	Severe/ Moderate /Low	
Archaeological Impact	Based on individual site assessment	
Local Water Environment	Based on individual site assessment	

## Appendix 4: Criteria for Selection of Sites for Landfill or Landraise

PHYSICAL		
Issue	Criterion	Comment
Access for Bulk Transfer, HGVs or Refuse Collection Vehicles	The direct access to the site shall be suitable for use by Bulk Transfer vehicle HGVs and Refuse Collection Vehicles as necessary	The access to the highway will need to meet the appropriate current access standards for commercial or industria premises.
Flooding potential	Sites should be in Flood Zone 1 as defined in PPS25.	Proposals for sites that fall outside Zone 1 shall demonstrate that they have been subjected to the Sequential Test set out in PPS25 and if sites in Zones 2 or 3 are proposed then they will need to be justified by reference to the Exceptions Test in the PPS. Where flood protection or other mitigation measures are in existence these may be taken into consideration in assessing whether a site meets this criterion
Suffolk Lorry Route Network	Sites to be within 3 miles of a Suffolk Lorry Route or a Zone Distributor Lorry Route identified in the Suffolk Lorry Route Network	
Impact on sites of national landscape importance	Site is not located in AONB or The Broads	
Impact on sites of national biodiversity importance	Site does not adversely affect directly or indirectly a SAC, SPA or SSSI	
Impact on Sites of national archaeological importance	Site does not adversely affect a site of national archaeological importance or adversely affect its setting	

#### **ABSOLUTE CRITERIA**

#### **COMPARATIVE CRITERIA**

#### PHYSICAL

Issue	Criterion	Comment
Compatibility with Neighbouring land use	Environmental impact to be considered	
Traffic Movements	Preference will be given to sites where traffic movements and haulage routes from waste collection activities to strategic waste management facilities are minimised	Includes data to assess opportunities for minimising distances travelled by waste from source to landfill site.
Landscape	Based on Individual site assessment	4km, 2km, 1km and 25m radius
Biodiversity geodiversity	Based on Individual site assessment	4km, 2km, 1km and 25m radius
Noise	Numbers of noise sensitive properties within specified distance bands	Up to 50m, 50-100m, 100-150m, 150- 200m, 200-300m, 300-600m
Air Quality	Numbers of sensitive properties within specified distance bands	Up to 50m, 50-100m, 100-150m, 150- 200m, 200-300m, 300- 500m, 500-1000m
Visual impact	Severe/ Moderate /Low	
Archaeological Impact	Based on individual site assessment	
Local Water Environment	Based on individual site assessment	

## Appendix 5: Policy Monitoring Framework

Policy	Performance Indicator	Targets					Monitoring method
WCS1: The Spatial Waste Management Strategy for Suffolk	Number of planning applications approved contrary to Policy	Nil					Determination of Planning applications
		Waste	2010/11	2015/16	2020/21	2025/26	Annual survey
		Municipal	501	519	538	538	
	Arisings compared with Sub-Regional	Commercial and Industrial	1,149	1,320	1,538	1,538	
	Waste Apportionment		220	107	106	106	
		Sub-Regional	Waste Ap	oortionmer	nt		
WCS3: Provision for the Recycling and Composting of Waste	Capacity of existing facilities approved for waste recycling and composting	To assess cap reflecting actu waste as surve	al arisings				Annual survey Recycling and Composting arisings and their sources.
WCS4: Allocated sites for Strategic Residual Waste Treatment Facilities	Capacity of existing facilities approved for Residual Waste Treatment	To assess cap reflecting actu Treatment site	al arisings	of Residua			Annual survey Residual Waste Treatment arisings at Residual Treatment sites, methods of disposal and their sources.

WCS5: Specific sites for Non- hazardous Landfill	Capacity of existing facilities approved for non-hazardous Landfill	To assess capacity against forecast in Table 6 whilst reflecing actual arisings at Non-hazardous Landfill sites as surveyed.	Annual survey Non-hazardous Landfill arisings and their sources.
WDM1: Safeguarding of waste management sites	<ul> <li>Number of waste sites closed and not relocated resulting from new development</li> <li>Number of Planning applications triggering Policy</li> </ul>	Nil Monitor only	Determination of Planning applications
WDM2: General considerations relevant to all waste management facilities	Number of applications a) approved b) approved but at variance with Policy c) refused	Monitor Only Nil Monitor Only	Determination of Planning applications
WDM3: Approval of sites for disposal of inert waste by landfilling or landraise	Number of applications a) approved b) approved but at variance with Policy c) refused	Monitor only Nil Monitor only	Determination of Planning applications
WDM4: Approval of sites for disposal of non-hazardous waste by landfilling or landraise	Number of applications a) approved b) approved but at variance with Policy c) refused	Monitor only Nil Monitor only	Determination of Planning applications
WDM5: General waste Management Facilities	Number of applications a) approved b) approved but at variance with Policy c) refused	Monitor only Nil Monitor only	Determination of Planning applications

	Number of applications		
	a) approved	Monitor only	Determination of
WDMC: Desidual	, , , ,	2	
WDM6: Residual	b) approved but at variance with	Nil	Planning applications
Waste Treatment	Policy	Manitan anti-	
facilities with a	c) refused	Monitor only	
capacity of less than			
100,000 tonnes	Total Capacity of approved Residual	Monitor only	Survey
annual throughput	Waste Treatment facilities with a		
	capacity of less than 100,000 tonnes		
	throughput per annum.		
WDM7: Waste	Number of applications		
transfer stations,	a) approved	Monitor only	
Materials Recycling	b) approved but at variance with	Nil	
Facilities, End of Life	Policy		Determination of
Vehicle Facilities	c) refused	Monitor only	Planning applications
and Waste Electrical			
and Electronic			
Equipment			
Recovery Facilities			
	Number of applications		
WDM8: Household	a) approved	Monitor only	Determination of
Waste Recycling	<ul> <li>b) approved but at variance with</li> </ul>	Nil	Planning applications
Centres	Policy		r laining applications
	c) refused	Monitor only	
	Number of applications		
WDM9: Enclosed	a) approved	Monitor only	Determination of
Composting	<ul> <li>b) approved but at variance with</li> </ul>	Nil	Planning applications
Facilities	Policy		r lanning applications
	c) refused	Monitor only	
	Number of applications		
WDM10: Open Air	a) approved	Monitor only	Determination of
Composting	b) approved but at variance with	Nil	Planning applications
Composing	Policy		
	c) refused	Monitor only	

	Number of applications		
	a) approved	Monitor only	
WDM11: Anaerobic	b) approved but at variance with	Nil	Determination of
Digestion	Policy		Planning applications
	c) refused	Monitor only	
WDM12: Proposals	Number of applications		
for recycling or	a) approved	Monitor only	
transfer of inert and	b) approved but at variance with	Nil	Determination of
construction,	Policy		Planning applications
demolition and	c) refused	Monitor only	
excavation waste			
	Number of applications		Determination of
	a) approved	Monitor only	Planning applications
	<ul> <li>b) approved but at variance with</li> </ul>	Nil	
WDM13: Waste	Policy		
Water treatment	c) refused	Monitor only	
	Number of Waste Water treatment	Monitor only	Survey
	Plants		
WDM14: Treatment,	Number of applications		
storage and disposal	a) approved	Monitor only	
of Low and Very	<ul><li>b) approved but at variance with</li></ul>	Nil	Determination of
Low Level	Policy		Planning applications
radioactive waste at	c) refused	Monitor only	
Sizewell nuclear			
power stations.			
WDM15: Treatment	Number of applications	· · · ·	
and storage of	a) approved	Monitor only	
Intermediate Level	b) approved but at variance with	Nil	
radioactive waste	Policy		Determination of
and spent fuel	c) refused	Monitor only	Planning applications
generated at			
Sizewell nuclear			
power stations			

WDM16: Transfer, storage, processing & treatment of hazardous waste	Number of applications a) approved b) approved but at variance with Policy c) refused	Monitor only Nil Monitor only	Determination of Planning applications
WDM17: Waste reduction, sustainable construction and demolition and provision of waste management facilities within new development WDM18: Climate Change mitigation and adaptation WDM19: Design of waste management facilities	Number of waste schemes incorporating sustainable construction and design principles	100% of applications	Determination of Planning applications

### **Appendix 6: Saved Waste Local Plan Policies**

The following policies from the Waste Local Plan are saved, unless otherwise stated, until the adoption of the Waste Core Strategy.

Policy	Subject
Waste L	ocal Plan Policies not saved
WLP1	General Policies and Principles
WLP3	Provision for Waste Management
Policy	Subject
Waste L	ocal Plan Policies saved
WLP2	Environmental Protection
WLP4	Recovery/Transfer
WLP5	Inert waste disposal
WLP6	Inert waste disposal
WLP7	Hazardous waste treatment facilities
WLP8	Hazardous waste only landfill sites
WLP9	Non Hazardous waste (MSW & C&I) recovery and transfer
WLP10	Non Hazardous waste (MSW & C&I) enclosed composting
WLP11	Non Hazardous waste (MSW & C&I) open air composting
WLP12	Non Hazardous waste (MSW & C&I) community composting
WLP13	Non Hazardous waste (MSW & C&I) anaerobic digestion
WLP14	Non Hazardous waste (MSW & C&I) thermal and other waste treatments
WLP15	Non Hazardous waste (MSW & C&I) thermal and other waste treatments
WLP16	Non Hazardous waste (MSW & C&I) landfill/ landraise
WLP17	Masons Landfill
WLP18	Waste water treatment
WLP19	Other waste development at waste water treatment works

WLP20	Safeguarding of waste water treatment works
WLP21	Metals and end of life vehicles
WLP22	Intermediate level radioactive waste and spent fuel
WLP23	Extension of time for landfilling
WLP24	Mining of waste
WLP25	Safeguarding of sites
WLP26	Temporary waste development

