# Bournemouth, Dorset and Poole



# Waste Plan Issues Consultation, December 2013







# Waste Plan Issues Paper

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Waste Plan Issues Paper

# 1 Introduction

# **1** Introduction

**1.1** Waste is a big issue for us all. The amount of waste we as a society produce costs businesses and households money and causes serious environmental concerns about how it should be managed. Waste is also increasingly recognised as a resource that can be recycled, thereby reducing demand for natural resources.

**1.2** If we are going to manage our waste more sustainably, encourage more recycling and reduce what we dispose of to landfill, we need to plan for the right types of facilities to help us do this.

**1.3** Bournemouth, Dorset and Poole are working together to produce a new Waste Plan, which will be our blueprint for how and where we manage the waste we produce over the next 20 years. This is the first public consultation on the new Waste Plan and is your chance to influence future waste management facilities and waste policies for the area. We want to hear your views on how we should develop this plan.

#### The Plan

**1.4** The Waste Plan will be expected to promote the sustainable management of waste in Bournemouth, Dorset and Poole. To do this, it will establish the objectives and spatial strategy for the development of waste management facilities up to 2030. We need to make sure there are enough sites and waste management facilities to recycle, reuse and dispose of waste from households, businesses, industry and construction. The Waste Plan will set out policies and identify locations to guide development proposals during the plan period.

#### Have your say on waste planning



**1.5** This Waste Issues Paper highlights the main waste planning issues facing Bournemouth, Dorset and Poole that have been identified and the potential options for addressing them. This consultation is an important stage in preparing the Waste Plan - the views of local communities, businesses, the waste industry, environmental groups and other interested organisations will inform the development of the plan. We need to make sure we are addressing the correct issues and find out how people think we should address these issues. Any comments made now will help decide how we should go forward.

**1.6** We have included some specific questions throughout and Chapter 4 highlights the key issues we have identified so far for waste management. We would encourage you to consider these as your comments will assist in developing the issues into policies

and site allocations. You can also comment on any other part of the document on anything you think is relevant.

**1.7** You can make your comments either on the online version of this document at: **www.dorsetforyou.com/waste-plan** or by completing a paper response form.

- **1.8** Response forms should be sent:
- by email to: <u>mwdf@dorsetcc.gov.uk</u>, or
- by post to: Planning Policy, Environment Directorate, Dorset County Council, County Hall, Colliton Park, Dorchester, DT1 1XJ.

**1.9** Copies of this document are available to view at Dorset County Council (County Hall, Dorchester), Bournemouth Borough Council (Town Hall Annexe) and the Borough of Poole (Civic Centre), as well as the district and borough council offices in the county.

Consultation period: 19 December 2013 - 13 February 20	014
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### **Preparing the Waste Plan**

#### Preparation of this document

**1.10** Although this is the first public consultation on the Waste Plan, the issues have not been identified in isolation. We have gained a good understanding of the county's waste industry through discussions with:

- Dorset Waste Partnership
- Bournemouth and Poole Waste Management
- The waste industry, both in Dorset and adjoining counties as appropriate
- The District and Borough Councils in Dorset, including specialists in relevant fields

**1.11** This has been supported by focused surveys to gain background evidence for the plan, including:

- A review of existing waste management facilities
- Survey of other authorities currently dealing with waste arising from Bournemouth, Dorset and Poole
- Waste industry survey on growth scenarios for different types of waste

**1.12** We also published a newsletter in July raising some initial issues for waste planning and inviting people to send in their ideas.

#### What time period will the Waste Plan cover?

**1.13** It is important at the outset to define an appropriate time period that the Waste Plan will cover. The time period will influence the total waste arisings to be dealt with over the plan period and the consequential scale of provision for waste management facilities which will need to be made.

**1.14** We are proposing that the Waste Plan will cover the period from 2014 to 2030.

# **Question 1**

The Waste Plan will cover a time period from 2014 to 2030. Do you think this is an appropriate timeframe?

#### What happens next?

**1.15** Following this period of consultation, we will review the comments made and develop the issues and options into policies and site specific allocations, as appropriate. We will prepare draft policies and identify suggested sites for waste facilities, which we will publish for another stage of public consultation in a draft Waste Plan.

#### Table 1 Waste Plan - Stages of Preparation

Key Stages	When
Waste Issues Paper	December 2013 - February 2014
Consultation on draft Waste Plan	Autumn 2014
Publication of Pre-Submission Draft of the Waste Plan	Spring 2015
Submission of Waste Plan to Secretary of State for independent examination	Summer 2015

#### Implementation of the Plan

**1.16** Once adopted, the Waste Plan will only partially be implemented directly by the local authorities. Often, it will be for the private sector to come forward with proposals for waste facilities on individual sites. The Waste Plan will provide the context for determining planning applications for such facilities. Although the Waste Plan will provide an indication of the types of facilities likely to be suitable for a particular site/area, technologies for dealing with waste are changing rapidly and so the Waste Plan will provide policies to guide this development and protect public interest.

# **Context for Waste Planning in Dorset**

**1.17** Bournemouth Borough Council, Dorset County Council and Borough of Poole are all Waste Planning Authorities. This means that they are responsible for determining planning applications and preparing planning policy for waste development in their respective areas. Planning applications are judged against the adopted planning policy for waste (as well as national policy and local policies). The current adopted plan is the Bournemouth, Dorset and Poole Waste Local Plan (2006). The new Waste Plan will replace this plan once it is adopted.

#### Who is Responsible for Waste Management in Bournemouth, Dorset and Poole?

**1.18** The three authorities are also responsible for waste management, including the collection and disposal of municipal waste, in their respective areas.

**1.19** The Dorset Waste Partnership (DWP) was officially launched on 1 April 2011 and provides waste and cleansing services for the six Dorset district councils.<sup>(1)</sup> Bournemouth and Poole provide their own waste collection services.

**1.20** Each of the waste disposal/collection authorities have responsibilities that include:

- Collection of waste from households and some commercial premises
- Street cleaning and litter control
- Arrangements via contracts for disposal/recycling of waste
- The provision and operation of sites where members of the public can take their own waste

**1.21** Bournemouth, DWP and Poole are each responsible for the production of a waste management strategy that provides the long term direction for municipal waste management in the county. The Waste Plan needs to take account of these strategies and has been referred to in the chapters that follow.

**1.22** Businesses across the county are free to make whatever arrangements they choose for managing their waste. In Dorset a range of waste service providers are known to be active in business waste collection, treatment and disposal.

#### Spatial Characteristics of Bournemouth, Dorset and Poole

**1.23** Dorset (comprising the three authority areas of Bournemouth, Dorset and Poole) is located on the south coast of England and has a total area of 265,273 hectares. It is a largely rural county with large expanses of highly valued countryside. The conurbation of Bournemouth and Poole, and the surrounding urban areas, together form the second largest urban area in the south west, with a population of almost 500,000. The population of Dorset as a whole is approximately 700,000.

**1.24** Dorset's environment is distinctive and highly valued. It combines internationally designated heathland and wetland habitats, two Areas of Outstanding Natural Beauty and much of its coastline is a UNESCO World Heritage Site. There are significant historic and cultural assets that contribute to the character and distinctiveness of the area. Consequently, many people in Dorset enjoy a good quality of life, with relatively low crime and the opportunity to enjoy a healthy lifestyle in attractive towns and villages.

**1.25** The area is diverse, from the functional, vibrant hub of the South East conurbation with award winning beaches at both Bournemouth and Poole, to the charming market towns and their attractive rural hinterlands with dispersed villages, the complementary towns of

<sup>1</sup> They are: Christchurch Borough Council, East Dorset District Council, North Dorset District Council, Purbeck District Council, West Dorset District Council, Weymouth & Portland Borough Council

Weymouth and Dorchester (the largest settlements outside South East Dorset), and the natural beauty of the Jurassic and Heritage Coast between Lyme Regis and Swanage. These broad geographical areas define the spatial context of the Waste Plan.



Figure 1

# 2 Guiding Principles

# **2 Guiding Principles**

**2.1** The Waste Plan's role is to identify sufficient opportunities to meet the identified needs of Bournemouth, Dorset and Poole for waste management. This will include identifying sites and areas for waste management facilities in appropriate locations, subject to consideration of issues such as environmental and cumulative impacts and sustainable transport. This role is set out within the Government's national planning policy for waste<sup>(2)</sup>, with which the Waste Plan will need to conform, along with national planning policy on other matters such as the environment, amenity and the economy.<sup>(3)</sup>

**2.2** The key principles that will steer the Waste Plan are explained below. A detailed review of the relevant legislation and policy context, drawing out the key messages for the Waste Plan, can be found in the Minerals and Waste Sustainability Appraisal Scoping Report 2013, Topic Paper 1: Waste.

#### **The Waste Hierarchy**

**2.3** The key concept that will influence the Waste Plan is the 'waste hierarchy', which ranks waste management options according to what is best for the environment. The management of waste in line with the waste hierarchy, illustrated in Figure 1, is both a guide to sustainable waste management and a legal requirement.





**2.4** The revised Waste Framework Directive introduced this hierarchy of options for managing waste<sup>(4)</sup>, giving top priority to preventing waste in the first place. When waste is created, it gives priority to preparing it for re-use. The stages of both prevention and re-use involve changes in consumer and manufacturing behaviour which are outside the control of local waste planning, although we will try to encourage this wherever possible. For the remaining waste, the hierarchy emphasises the recycling or composting of as much waste as possible. Following this, there are various ways of recovering energy from residual waste and using this to generate heat and/or power. Waste disposal, for example to landfill, is seen as the last resort for wastes that cannot be managed higher up the waste hierarchy.

**2.5** The Waste Plan will aim to establish planning policies and site specific allocations for facilities to recycle, recover or dispose of our waste in the most sustainable manner, contributing towards the aim of a zero waste economy. It will play a key role in establishing a reasonable balance between the waste management options in order to move waste up the hierarchy over the next 20 years.

### The Proximity Principle & Self Sufficiency

**2.6** The principle of proximity - that waste should be disposed of, or recovered, as closely as possible to where it is produced - is another important driver for the Waste Plan. The principle is established by the revised Waste Framework Directive. It operates within the context of the requirement to establish an integrated and adequate network of facilities for waste disposal and recovery of mixed municipal waste collected from private households (and other producers).

**2.7** This waste infrastructure network must enable waste to be managed in one of the nearest appropriate facilities, through the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health.

**2.8** The Directive also requires that the network is designed in such a way as to enable a move towards self-sufficiency in waste disposal and recovery. This means that Waste Planning Authorities should as far as practicable aim to ensure that there is sufficient capacity available for waste generated in their area to be dealt with in their area. However, account must be taken of geographical circumstances or the need for specialised facilities for certain types of waste. For example, the specialised nature of hazardous waste facilities means that they tend to serve a wider than local market.

**2.9** Nevertheless, this principle must be applied when decisions are taken on the location of appropriate waste facilities<sup>(5)</sup> and so will be an important consideration for the Waste Plan.

The waste hierarchy is set out at Article 4 of the revised Waste Framework (Directive 2008/98/EC). The definitions of each of the stages can be found in Article 3 of the Directive.

<sup>5</sup> Waste Management Plan for England (Defra 2013)

#### **Recycling Targets**

**2.10** To reinforce the waste hierarchy, there are strict EU targets for reducing what is sent to landfill. To make sure that we meet these, the UK has introduced its own specific recycling and recovery targets. At present, these apply mainly to municipal waste but may in the future apply to other wastes.

**2.11** The current targets for recycling in England, set through the revised Waste Framework Directive, are for:

- at least 50% by weight of waste from households to be prepared for re-use or recycled by 2020
- at least 70% by weight of construction and demolition waste to be subjected to material recovery by 2020
- 2.12 Dorset has a target of achieving a 60% recycling and composting rate by 2015/2016.<sup>(6)</sup>

**2.13** There are also restrictions on how much municipal waste can be sent to landfill each year. In the UK, we are required by the Landfill Directive to reduce by 2020 the amount of biodegradable municipal waste that is landfilled to 35% of the amount that was landfilled in 1995. Along with the Landfill Tax, which has increased the cost of landfilling, this has been a principal driver behind the development of new waste management facilities in the UK in recent years. The Government has committed to further review of landfill restrictions, including for textiles and food waste. <sup>(7)</sup>

**2.14** The Waste Plan can assist in achieving these targets by developing appropriate policies in line with the waste hierarchy.

#### Sustainable Development

**2.15** Sustainable development is about meeting the needs of the present generation without compromising the ability of future generations to meet their needs. Sustainable development means balancing environmental, economic and social needs. This is emphasised through the National Planning Policy Framework, which highlights the need for planning to perform three roles in relation to these three dimensions:

- an economic role where we are contributing to building a strong, responsive and competitive economy
- a social role where we support strong, vibrant and healthy communities
- an environmental role were we are contributing to protecting and enhancing our natural, built and historic environment

<sup>7</sup> https://www.gov.uk/government/policies/reducing-and-managing-waste

**2.16** The National Planning Policy Framework sets out a presumption in favour of sustainable development, which it states should be seen as a 'golden thread' running through plan-making and decision-taking. This means that development which is 'sustainable' should be approved without delay. The Waste Plan will need to guide how this presumption will be applied locally to the development of waste management infrastructure.

#### **Community Responsibility and Local Initiatives**

**2.17** As well as finding the most appropriate ways of dealing with our waste, the planning system also has a role to play in helping communities to take greater responsibility for their own waste by making sure that we can manage our waste safely and as close as possible to where it is produced. Overall, these measures are designed to make sure that we reduce the wider impact of waste on the environment, including limiting any contribution to climate change.

**2.18** There are a number of local initiatives that assist residents and businesses in reducing their waste. Household recycling and composting collections are a vital way of enabling recycling at the local level.

#### **Recycle for Dorset**

The Dorset Waste Partnership (DWP) is currently implementing a standard waste and recycling collection service across the six Dorset district and borough councils, called 'Recycle for Dorset'. The collection comprises a 240 litre wheelie bin for paper, cardboard, plastics, tins, cans and aerosols; a green recycling box for glass bottles and jars and a small reusable bag for batteries, all collected fortnightly. It also includes a weekly collection of food waste and fortnightly collection of 'black bag' rubbish from a 140 litre wheelie bin. There is also the option to pay for a fortnightly garden waste collection.

The new scheme is being rolled out in phases and will be fully operational throughout the last local authority area of West Dorset in 2015. The Dorset Waste Partnership has aspirations through this scheme to: drive down costs by £2m a year, increase Dorset's recycling rate from 50% to more than 65% a year and reduce the amount of waste sent to landfill sites.

More information can be found at: www.dorsetforyou.com/recycle-for-dorset

#### **Big Bin, Little Bin - Bournemouth**

In Bournemouth, a 'Big Bin, Little Bin' collection scheme has been in operation since 2006. This comprises a fortnightly co-mingled recyclates collection and a weekly rubbish collection. There is also a seasonal opt-in garden waste collection.

#### **Blue Bin Scheme - Poole**

Poole residents have had a fortnightly mixed recycling collection since 2004, and continue to have a weekly residual waste collection. Residents have been encouraged to change to small residual bins and larger recycling bins with currently one third of properties having done so. New strategies and methods may be explored and implemented during the life of the Waste Plan. There is also a seasonal opt-in chargeable garden waste collection.

**2.19** There are also a number of household recycling centres across the county, most of which also have an area for unwanted but reusable items. Similarly charity shops provide a means of reusing items that otherwise might become waste. There are also numerous 'bottle banks' (which take more than just bottles nowadays). <sup>(8)</sup>

**2.20** The Waste Plan is primarily concerned with establishing the type and amount of facilities required to manage our waste, but will assist in delivering a fit for purpose network of household recycling centres. We will also work with the local councils to ensure that new developments take account of waste management, such as by encouraging new housing schemes to provide enough space for bins and recycling bins.

**2.21** If you would like to find out more about preventing or re-using waste there are various campaigns and websites that can provide useful tips and information:

**www.recyclenow.com** - offers advice and ideas for recycling at home, school or in the workplace

**uk.freecycle.org** - a charity which offers a way to donate your unwanted items so that others can use them

**www.wrap.org.uk** - the Government's Waste Resources action Programme, which helps businesses and individuals to reduce waste and use resources sustainably

**www.lovefoodhatewaste.com** - a national campaign with advice and tips on how to reduce food waste and use up leftovers

<sup>8</sup> For locations see: www.dorsetforyou.com/recycling-centres/mini www.boroughofpoole.com/environment/recycling-rubbish-waste/recycling/recycling-banks/ www.bournemouth.gov.uk/Environment/RecyclingWaste/NeighbourhoodRecyclingCentres.aspx

# 3 What waste is produced?

# **3 What waste is produced?**

#### What is waste?

3.1 The EC Waste Framework Directive <sup>(9)</sup>defines waste as:

#### "any substance or object which the holder discards or intends or is required to discard."

**3.2** Wastes are classified under EU legislation and include waste from a number of different waste streams. The four main waste streams that arise in Dorset and have to be planned for are:

- Municipal Solid Waste (MSW)
- Commercial and Industrial (C&I) waste
- Construction, Demolition & Excavation (CDE) waste (CDE)
- Hazardous waste

**3.3** The plan will also cover waste water, agricultural waste and radioactive waste. This chapter describes each of the four main waste streams and considers current trends in arisings and how these may change.

#### What waste do we produce?

**3.4** Annually, around 2 million tonnes of waste is produced in total in Bournemouth, Dorset and Poole. Figure 3 shows that construction, demolition and excavation waste forms the largest proportion of waste generated with over half the waste arisings comprising this waste stream in 2009. Municipal solid waste and commercial and industrial waste comprise similar proportions at around a quarter each; whilst hazardous waste forms only 2% of total waste arisings.



Figure 3 Proportions of Waste Arisings in Dorset, Bournemouth & Poole (2009)

**3.5** These categories of waste are not uniform in character and include various waste streams within them. MSW, CDE waste and C&I waste are all categorised by their origin or source, whilst hazardous waste is defined by its composition and can occur within the other three waste streams.

**3.6** Waste can be broadly classified into three groups based on characteristics, which are shown below. Of the major waste streams described above, some fall into one of the three waste groups, whilst others contain elements of more than one type of waste. This is illustrated in the final column of Table 2.

Waste Group by Characteristic	Definition	Waste Stream
Inert	Waste which, when deposited into a waste disposal site, does not undergo any significant physical, chemical, or biological transformations and which complies with the criteria set out in Annex 111 of the EC Directive on the Landfill of waste.	Inert waste is mainly derived from the Construction, Demolition and Excavation stream.
Non-Hazardous	All those wastes that do not fall under the definition of hazardous waste and do not meet the waste acceptance criteria for inert waste.	Non hazardous waste is derived from both municipal waste and commercial and industrial streams.

#### Table 2 Types of Waste

Waste Group by Characteristic	Definition	Waste Stream
	Non-hazardous waste does not have any significant hazardous properties and may be biodegradable.	
Hazardous	Waste which has hazardous properties and poses a greater risk to the environment and human health than non-hazardous waste. The Hazardous Waste Directive (91/689/EC) sets out the legal framework for the definition of hazardous wastes in Europe. Wastes are defined as hazardous if, for example, they are highly flammable, harmful, toxic, carcinogenic or corrosive. This includes waste from industrial chemical processes, oil refining, metal processes, solvents, waste oils, some chemical waste and asbestos.	Waste predominantly derived from the hazardous waste stream, however hazardous wastes can also come from the construction, demolition and excavation stream and in small quantities from the municipal waste and commercial and industrial streams.

# Municipal Solid Waste (MSW)

Municipal Solid Waste is the waste generated by households, commercial activities and other sources whose activities are similar to those of households and commercial enterprises. MSW is collected by Dorset Waste Partnership, Bournemouth Borough Council and Borough of Poole. It is usually made up of recyclable materials (e.g. paper and glass), residual waste, bulky waste, household hazardous, street sweepings and litter collections. It includes waste collected from the household and that brough to household recycling centres and 'bring' sites.

The term **"Local Authority Collected Waste" (LACW)** is also used in this document to refer to municipal waste that is managed by the Waste Collection and Disposal Authorities.

**3.7** Municipal waste arisings in England have been falling in recent years and Dorset is following this trend. Over the six year period from 2007/2008 to 2012/2013, arisings decreased by 10%, at a rate of around 2% per annum. This can be attributed to a reduction in the amount

of household waste produced as a result of waste reduction and recycling initiatives, as well as the current economic conditions slowing down consumption. Municipal waste arisings make up almost a quarter (21%) of total waste arisings in Bournemouth, Dorset and Poole, totalling just under 380,000 tonnes in 2012/13.

**3.8** Unsurprisingly the management methods for municipal waste have also changed over recent years. Recycling rates have increased and final disposal to landfill has steadily decreased. Current percentages are shown in Table 3.

	Reuse, recycled & composted	Landfill
Dorset Waste Partnership	48%	36%
Bournemouth	50%	10%
Poole	40%	41%

#### Table 3 Percentage waste reused, recycled, composted and landfilled (2012-2013)

**3.9** Municipal waste is currently managed by the Dorset Waste Partnership (DWP), Bournemouth Waste Management and Poole Waste Management through a network of facilities within and outside of Dorset and through a series of waste disposal contracts.

**3.10** Estimating future waste arisings is essential to assess needs for waste management facilities. Future growth is assessed and predicted through the waste management strategies of the three authorities. The Dorset Joint Municipal Waste Management Strategy (2009) assumes an indicative overall growth rate of 1% per annum. The Bournemouth Municipal Waste Management Strategy (2012) assumes a growth rate in arisings of 0.5 - 1% per year, taking into account population increase. Borough of Poole's Waste Strategy Review (2008) recommends using a 1% growth rate assumption, based on population and behavioural growth.

**3.11** However, the waste management industry is changing rapidly and the information contained within the three waste management strategies may now be out of date. Further consideration has therefore been given to national trends, population growth and the impact of local waste collection initiatives. DWP has taken into consideration future planned housing and suggests that we plan for growth in arisings of 3% per annum for2013/14, followed by 1% a year to the end of the plan period. Bournemouth and Poole have indicated that the current situation is of 0% growth per annum as waste arisings decline but population increases.

# **Question 2**

#### Growth in municipal solid waste arisings

Dorset:

- 3% per annum for the year 2013/14
- 1% per annum for the years 2015 2030.

#### Bournemouth and Poole:

• 0% per annum for the plan period

These assumptions are based on detailed information provided by the three Waste Management Authorities. Do you have any comments on the assumptions?

**3.12** Chapters 5-7 use these assumptions as a basis to project future arisings, and consider how and why the different elements of municipal waste (recyclates, organic and residual waste) might change during the plan period.

# **Commercial and Industrial Waste (CIW)**

Commercial and industrial waste arises from premises that are wholly or mainly used for trade, business, sport, recreation or entertainment and waste from a factory or from any premises used for or in connection with provision of public transport, public supply of gas, waster, electricity or sewerage services, or provision to the public of postal or communication services.

For the purpose of the Waste Plan commercial and industrial waste includes agricultural waste i.e. all wastes that are discarded from agricultural premises except on-farm animal and plant wastes, which fall outside the scope of the Waste Plan.

**3.13** Data on commercial and industrial waste arisings is less readily available than that for municipal waste. The Commercial and Industrial Waste Survey undertaken by Defra <sup>(10)</sup> provides the most reliable and comprehensive set of national data for C&I waste. In England, 47.9 million tonnes of waste were generated by businesses in 2009. The industrial sector accounted for 24.1 million tonnes and the commercial sector 23.8 million tonnes. 52% of C&I waste was recycled or reused in 2009 nationally.

**3.14** The survey identified that almost 0.5 million tonnes of C&I waste was generated in Bournemouth, Dorset and Poole in 2009. Of the total commercial and industrial waste arisings around 53% was recycled or composted, 24% was disposed of by landfill, and 0.7% was treated with energy recovery. Around 5% was transferred onwards and approximately 3% was reused.

**3.15** C&I waste is managed at a range of sites, according to market and availability of facilities. There are a number of landfill sites and treatment facilities within the plan area that accept C&I waste, including those which are also contracted to deal with Bournemouth, Dorset and Poole's municipal waste, plus further facilities dealing only with C&I waste. Some commercial and industrial waste is sent out of Dorset for processing.

**3.16** Making future projections and forecasts of commercial and industrial waste arisings can be a difficult and complex process. Based on inherently patchy baselines, any projections are also subject to future uncertainty factors, such as levels of economic growth and the impact of waste prevention and resource efficiency practises, programmes and campaigns.

**3.17** The Commercial and Industrial Waste Survey referred to above stated that waste arisings had declined since 2002/2003, by 36% for industrial wastes and 21% for commercial wastes. The Waste Plan needs to consider how arisings have changed since 2009 and how to forecast arisings to the end of the plan period in order to consider how much capacity is required for the management of commercial and industrial waste.

### **Question 3**

#### Growth in commercial and industrial waste arisings

**Assumption:** We are assuming an overall growth rate of 0% in commercial and industrial waste over the plan period. Chapters 5-7 use this assumption as a basis to project future arisings and considers how and why the different elements of commercial and industrial waste (recyclates, organic and residual waste) might change during the plan period.

**Reason:** An overall growth rate of 0% is broadly in line with municipal waste and given the similar nature of the waste this is considered a reasonable assumption. Similar factors that are likely to influence C&I waste arisings and MSW arisings include the Landfill Tax, Aggregates Levy, and producer responsibility measures such as the Packaging and End of Life Vehicles and Batteries Directives.

Recent evidence on commercial and industrial waste growth <sup>(11)</sup> also suggests a fairly stable production of waste.

#### **Alternative Options**

There may be alternative options to the approach set out above. Given the uncertainty over existing C&I waste arisings, we would welcome stakeholders' views on future projections.

Which of the following options for forecasting C&I waste arisings during the plan period do you consider to be most appropriate?

- 1. Overall arisings will remain constant, following a similar pattern of growth to that of Municipal Solid Waste during the plan period = 0% Growth
- 2. Growth in arisings will be in line with economic growth = 2% Growth per annum
- 3. An alternative option. Please explain an alternative level of growth and the reasons for your suggestion.

### Construction, Demolition and Excavation Waste (CDE)

Construction, demolition and excavation waste arises from activities such as the construction of buildings and civil infrastructure, total or partial demolition of buildings, road planings and maintenance. It is made up of numerous materials including concrete, bricks, wood, glass, metals, soils etc. It may also include some hazardous materials such as solvents and asbestos.

**3.18** The construction, demolition and excavation sector is the largest contributing sector to total waste generation in England. The sector generated 77.4 million tonnes of waste in 2010, of which over half was recycled.

**3.19** Data on CDE waste arisings is difficult to obtain at the local level. A large proportion is likely to be recycled and/or re-used where it is generated (i.e. on construction sites). As this waste doesn't need to be managed at a waste facility, it is not recorded.

**3.20** However, it is possible to use the national estimates on the amount of waste generated by the construction, demolition and excavation sectors, compiled by Defra, <sup>(12)</sup> and apportion this to the local level. We have apportioned the national figures to Bournemouth, Dorset and Poole based on the level of construction activity (calculated as the gross value added of the construction industry by area) and by population. Both methods give a similar figure. Although a crude estimate, this method has been used to give an indication of arisings in Bournemouth, Dorset and Poole of around 1 million tonnes for each of the years 2008, 2009 and 2010.

#### **Question 4**

Do you agree that the estimated level of CDE waste arisings in Bournemouth, Dorset and Poole of 1 million tonnes per annum is reasonable, based upon the evidence available?

**3.21** We need to plan only for CDE waste that needs to be dealt with through our waste management facilities, which is likely to be significantly lower than actual arisings. It is considered that the best way to establish a basis for the amount of CDE waste that needs to be managed is to look at the amount that is currently managed at our existing facilities.

**3.22** According to a survey of existing waste facilities in the county, the current amount of waste managed at inert landfill sites together with that received at inert recycling facilities equates to around 355,000tpa. Environment Agency data indicates similar quantities of inert, construction and demolition waste being managed in Dorset.

# Question 5

Do you agree with using a figure of the current amount of inert waste managed as a baseline for the amount of CDE waste that we will need to manage in the future?

**3.23** The cost of transporting construction and demolition waste suggests it is unlikely to travel far and it is assumed that most CDE waste arisings are managed within, or close to, Dorset. There are a number of recycling facilities and inert landfill sites that currently deal

<sup>12</sup> Construction, demolition and excavation waste generation estimate: England 2008 to 2010 (Defra 2012) at https://www.gov.uk/government/publications/construction-and-demolition-waste

with construction and demolition waste in Dorset according to market and availability of facilities. Some recycling facilities are large permanent sites, others are smaller temporary facilities in quarries and on landfill sites.

**3.24** Given the relatively poor data on the construction and demolition waste stream there may be insufficient basis for making forward projections of arisings with any confidence. However, an assumption needs to be made in order to assess whether additional capacity is needed in the county for dealing with this waste stream.

# **Question 6**

#### Growth in construction, demolition & excavation waste arisings

**Assumption:** We are assuming an overall growth rate of 0% in construction, demolition and excavation waste over the plan period. Chapter 8 uses this assumption as a basis to project future arisings

**Reason:** The assumption that net arisings of CDE waste will remain constant over time reflects in part the impact of the Landfill Tax and the Aggregates Levy, which will encourage the re-use of CDE waste on site and the production of recycled aggregates, in order to avoid additional disposal and raw material costs.

#### **Alternative Options**

There may be alternative options to the approach set out above. Given the uncertainty over existing CDE waste arisings, we would welcome stakeholders' views on future projections.

Which of the following options for forecasting CDE waste arisings during the plan period do you consider to be most appropriate?

- 1. CDE waste arisings will remain constant = 0% growth
- Growth in CDE waste arisings will be in line with growth in the construction sector (measured in terms of Gross Value Added for the sector) = a steady increase between 1.4% at the beginning of the plan period to 1.6% at the end.
- 3. Growth in CDE waste arisings will be in line with population growth = 1.4% per annum growth
- 4. An alternative option. Please explain an alternative level of growth and the reasons for your suggestion.

# **Hazardous Waste**

Hazardous waste contains one or more substances which might be dangerous to the environment or life, as set out in Annex III of the revised Waste Framework Directive. Examples of hazardous waste include: clinical waste, some Waste Electrical and Electronic Equipment (WEEE), asbestos, chemicals (e.g. brake fluid or print toner), batteries, solvents, pesticides, oils (non-edible) and equipment containing ozone depleting substances (e.g. fridges).

**3.25** Hazardous waste is defined as needing special management because it is difficult to handle or potentially polluting or dangerous.

**3.26** Hazardous waste accounts for only a small percentage of total waste arisings (in 2008 around 3% of waste arisings in England and Wales were hazardous). The amounts of hazardous waste produced are still significant however, with around 4.8 million tonnes arising in England and Wales in 2008.

**3.27** Nationally, there is no clear trend in hazardous waste arisings with amounts fluctuating from year to year, partly due to changes in definitions of hazardous wastes.

**3.28** In 2011, hazardous waste arisings in Dorset were around 47,200 tonnes. <sup>(13)</sup> According to Environment Agency data, around 36,800 tonnes of hazardous waste was deposited in Dorset in the same year. Around 25,000 tonnes of hazardous waste originating in Dorset were exported in 2011 <sup>(14)</sup>Over the 4 year period 2008 - 2011 hazardous waste arisings have shown no clear trend with levels varying between 40,000 and 50,000 tpa.

**3.29** Hazardous waste is dealt with at a range of specialist facilities, in some cases within the county but in many cases outside of the county. The specialised nature of hazardous waste facilities means that facilities tend to serve a wider than local market.

13 Environment Agency SW Hazardous Waste 2011

<sup>14</sup> Hazardous Waste Interrogator 2011 - Note that this could include waste that has come from a hazardous waste transfer station in the county and so may not have truly 'arisen' in Dorset.

# **Question 7**

#### Growth in hazardous waste arisings

**Assumption:** We are assuming an overall growth rate of 0% in hazardous waste over the plan period. Chapter 9 discusses how the plan might deal with hazardous waste in further detail.

**Reason:** There are no clear trends in hazardous waste arisings and no likely significant increases are known of. In the absence of any higher level guidance on this issue, this assumption is considered reasonable.

Do you agree with the assumption that overall hazardous waste arisings will remain constant over the plan period?

# 4 Meeting our Future Needs

# **4 Meeting our Future Needs**

**4.1** The previous chapter considered current waste arisings and trends for each of the main streams of waste arising in Bournemouth, Dorset and Poole. The next step is to understand how this waste is currently being managed, the capacity of existing sites and how things might change during the plan period. We then need to consider whether existing facilities will be appropriate and have the capacity to accommodate these changes throughout the plan period or whether additional facilities will need to be considered.

#### **Existing Facilities**

**4.2** There is a network of existing waste management facilities across Bournemouth, Dorset and Poole and beyond that deal with waste arising in the plan area, as shown on Figure 4. Most of these facilities deal with waste arisings from more than one waste stream. Due to the similarities in the composition of the waste, MSW and C&I waste are almost always dealt with together in the same facilities. For example, existing waste treatment facilities and landfill sites in Dorset tend to deal with a mixture of waste arising from municipal contracts as well as commercial and industrial sources.



Figure 4

**4.3** There are two non-hazardous landfill sites and ten permitted inert landfill sites in the county. There is also a range of treatment facilities. These include anaerobic digestion plants, a number of Materials Recycling Facilities, a Mechanical & Biological Treatment Plant; various

composting facilities, inert recycling facilities and two hazardous waste treatment facilities. The county also has a network of waste transfer facilities, including thirteen Household Recycling Centres, and twelve metal recycling sites. In addition there are also a number of permitted but not yet operational facilities which have the capacity to manage waste in the future.

#### Estimating Existing Capacity, Shortfall and the Need for New Facilities

**4.4** Given that most of our existing facilities deal with waste from a number of waste streams, the most appropriate way to estimate capacity is based on the types of waste managed rather than the original waste stream.

- **4.5** The chapters that follow divide waste arisings into four key waste types:
- Recyclables materials that can be converted into new products, such as glass, paper and plastic
- Organic waste waste which is biodegradable, meaning it can be broken down, in a reasonable amount of time, into its base compounds by micro-organisms and other living things, such as garden and food waste
- Residual waste the waste left after all the materials that can be recycled and composted have been removed
- Inert materials waste materials that won't undergo any significant physical, chemical, or biological transformations, such as rubble and soils.
- 4.6 Other wastes, including hazardous, are discussed separately in Chapter 9.

**4.7** Within these chapters we have explained the different types of facilities that currently deal with wastes and how these management methods might change over the plan period. A survey has been carried out with the waste management industry in order to gain information on existing capacity and annual waste throughput. Planning permissions have also been reviewed to consider limitations on capacity and end dates where facilities have temporary permissions. This survey has given us a thorough understanding of existing operations and capacity in the county.

**4.8** We have then estimated future arisings of the four main types of waste. There are many uncertainties over forecasting future waste arisings and recycling rates during the plan period. Changes in the economy, attitudes to waste, local initiatives, strategies and many other issues can strongly impact on collection arrangements and future trends. We have therefore made a series of assumptions. These assumptions are summaries in orange boxes and reflect the best available information at the time writing. We would ask stakeholders to consider whether the assumptions are reasonable. If, during this consultation, strong arguments are raised for alternative growth scenarios, then the needs can be reassessed accordingly. In addition, as and when new information becomes available, the assumptions may need to change accordingly and this will be reflected in further consultations.

**4.9** When compared against anticipated arisings over the plan period, we have been able to make as assessment of the potential shortfall in capacity from existing facilities and therefore the need for additional facilities to manage different types of waste arising during the plan period.

#### **Key Issues**

**4.10** The focus of the Waste Plan is to identify and resolve a series of key strategic, spatial issues. These issues are the primary tasks that the plan will need to tackle, although the Plan will also address many other important and locally specific issues. The key issues are not necessarily specific to Dorset but their resolution will require a debate of the relevant local circumstances.

**4.11** An initial range of issues pertinent to the Plan have been developed through our assessment of needs and discussions with the Waste Management Authorities and waste industry. These will be refined following this consultation and future engagement. The issues are explored in detail in the chapters that follow.

#### Key Issue 1 - Sustainable Waste Management

How can we ensure that there is the right provision of waste management facilities in Bournemouth, Dorset and Poole to move waste up the waste hierarchy and minimise the levels of residual waste?

#### Key Issue 2 – Movement of waste

To what extent can a network of facilities be established in Bournemouth, Dorset and Poole to maximise self-sufficiency and to enable waste to be managed as close to where it arises as practicable, balanced against local impacts on Dorset's environment and communities?

# Key Issue 3 - Recyclables

Increased levels of recycling in the plan area and the way recyclables are being collected means that we do not have sufficient fit for purpose facilities in Bournemouth, Dorset and Poole. There is an urgent need for a strategic Materials Recycling Facility, supported by a network of local household recycling centres and waste management centres, to move waste up the waste hierarchy and increase self sufficiency.

How can we best address this need to ensure that recycling is maximised?

# Key Issue 4 - Organic Waste

Separate food waste collections will require suitable facilities, such as anaerobic digestion plants, particularly if organic waste arisings increase from the commercial and industrial sector.

How can we best provide for a network of facilities in the county taking into account proximity to organic waste arisings?

# Key Issue 5 - Residual Waste

In Bournemouth, Dorset and Poole, landfill capacity is diminishing and treatment capacity for, residual waste within the county, is insufficient to meet our needs, particularly towards the end of the plan period.

How do we meet the identified need for facilities to deal with Bournemouth, Dorset and Poole's residual waste arisings, taking into account the waste hierarchy?

### Key Issue 6 - Inert Waste

How do we provide for sufficient capacity for the management of inert waste generated throughout the plan period, ensuring that wherever possible materials are recycled in the first instance and that the spatial distribution of facilities provides local recycling and disposal options?

# Waste Plan Issues Paper

# Recycling

# **5 Recycling**

**5.1** This section provides a summary of the existing facilities that deal with recyclable material in Dorset, how the quantities of recyclates are thought to change over the plan period and how these changes can be facilitated.



#### **Current Recycling Facilities**

**5.2** Recyclable materials in Dorset are managed through the county's network of Household Recycling Centres and Waste Management Centres. Materials are transferred from the Household Recycling Centres or Waste Management Centres to Materials Recycling Facilities (MRF). For local authority collected waste in Dorset, the materials are currently sorted and bulked up at one of two small scale MRFs (located in Crossways and Hurn). Both are small operations which facilitate the onward movement of source-separated recyclates out of the county for further treatment and reprocessing. The introduction of the 'Recycle for Dorset' scheme means that waste collected from households will be in a 'co-mingled' form. The Hurn facility will soon become unsuitable as it is not big enough to store the anticipated quantities of co-mingled recyclables and has only basic equipment for sorting the material. The Crossways facility will continue to be able to be used as a bulking up and transfer facility.

**5.3** Co-mingled recyclables collected from households in Poole and Bournemouth are currently bulked up at Nuffield Recycling Centre for onward travel to a materials recycling facility (MRF) in Kent for further treatment.

**5.4** There are three further existing materials recycling facilities that currently deal mainly with waste from the commercial and industrial sector: Canford Recycling Centre and Sita's Mannings Heath site in Poole and Binnegar Environmental Park near Wareham.




## How things might change

**5.5** The collection of co-mingled recyclables in Bournemouth and Poole is well established and there are no current proposals to change the collection regime, although this may change during the life of the plan period. As a result growth of 0% is assumed throughout the plan period. However, the contract to export co-mingled recyclables from Bournemouth and Poole to the facility in Kent runs out during the early part of plan period. The assumption is that there will be a shift away from exporting recyclables out of the county. Inevitably this would see a sharp rise in the recyclables to be managed in Dorset.

**5.6** With the roll out of the new co-mingled collection of recyclables throughout Dorset, detailed projections have been prepared of how this will impact on recycling rates until 2018. For example recycling rates in Weymouth are set to rise from 50% to 68% when the new service is fully established. In addition, continued growth in recyclables, based on a proportion of the 1% overall growth in arisings, is assumed from 2019 to the end of the plan period.

**5.7** Currently around 50% of waste arising from the commercial and industrial stream is recycled. For the purposes of this plan, it has been assumed that this level of recycling will remain constant throughout the plan period. However, the plan needs to remain flexible to accommodate any increases in recycling from the commercial and industrial waste stream.

**5.8** In summary, significantly increased quantities of co-mingled recycled materials will be collected and will need to be managed in Dorset, particularly during the beginning of the plan period.

#### **Summary of Assumptions**

- 0% growth in local authority collected recyclables in Bournemouth and Poole throughout the plan period
- There will be a significant growth in local authority collected recyclable materials in Dorset during the plan period
- 0% growth in recyclables from the commercial and industrial stream throughout the plan period
- The amount of recyclables exported out of the county will reduce

## **Current Capacity and Potential Shortfall**

**5.9** To deal with the increased quantities of recycled materials, permission has been granted for new Materials Recycling Facilities at Mannings Heath (W&S Recycling) and Canford Magna (New Earth Solutions), both in Poole. If one of these facilities is developed Bournemouth, Dorset and Poole will have sufficient capacity for the sorting and transfer of recyclables collected from households, shops and offices throughout the plan period. This would ensure that Dorset achieves its aim of self sufficiency for recyclable materials by 2019. In fact, if one new MRF is developed there will be a surplus in capacity of between 35,000tpa and 60,000tpa. This would provide flexibility, allowing for further increases in recycling, particularly in the commercial and industrial stream.

**5.10** Table 4 also demonstrates that without the development of a MRF in Dorset, there will be a shortfall in capacity of between 40,000tpa and 65,000tpa during the plan period.

	2014	2016	2019	2027
Need (tpa)	340,355	344,020	345,623	347,340
Capacity (tpa)	398,700	398,700	381,700	381,700
With a new MRF - Overcapacity (tpa)	58,345	54,680	36,077	34,360
Nithout MRF - Shortfall (tpa)	- 41,655	- 45,320	- 63,923	- 65,640

# Key Issue - Recyclables

Increased levels of recycling in the plan area and the way recyclables are being collected means that we do not have sufficient fit for purpose facilities in Bournemouth, Dorset and Poole. There is an urgent need for a strategic Materials Recycling Facility, supported by a network of local household recycling centres and waste management centres, to move waste up the waste hierarchy and increase self sufficiency.

How can we best address this need to ensure that recycling is maximised?

## What is the identified need?

**5.11** As a materials recycling facility is yet to be built, the section below sets out some of the initial options for the development of a MRF in Dorset. A full sieve exercise of potential options is yet to be carried out by the waste planning authority. We would welcome stakeholders' views on these sites and alternative sites particularly where they fall within the broad area identified on Figure 6.

**5.12** The progress of the development of a MRF for Dorset will be closely monitored. Given the pressing need for this facility, it is hoped that the facility will be delivered during the preparation of the Waste Plan and therefore no site will need to be allocated in the adopted plan.



Figure 6

## Identified Need 1 - Materials Recycling Facility (MRF)

## Why?

- Insufficient facilities already exist in the plan area, some recyclables are currently being sorted outside of the county.
- Facilities that currently exist cannot cope with co-mingled recyclables and the increased tonnage of recycled materials being collected.

## Where?

As the need for this facility is driven by Bournemouth, Dorset and Poole, the facility needs to be strategically located in the County. Given that Dorset is a rural authority and the largest quantities of recyclables will be derived from in and around the conurbation, this would most likely be the most suitable location for such a facility. Accessibility from the rest of the county is a consideration. Figure 6 shows a broad area considered best suited for such a facility.

## When?

Urgently required, therefore may be outside the scope of the Waste Plan process. It is likely that a tender will be awarded to a waste management company to build this facility in partnership with the waste authorities early in 2014.

## What are the land use requirements?

See methodology for site selection

## **Known Options**

- Mannings Heath, Poole. There are a number of possible locations within this industrial area. Planning permission currently exists on a brownfield site. Elsewhere the existing MRF (SITA) could be developed further. Mannings Heath is strategically in a good location with good access from Bournemouth, Dorset and Poole.
- 2. Canford Magna, Poole. This is a site with a number of existing waste uses and planning permission currently exists for a MRF. This site could provide benefits in terms of co-location of waste facilities. However the site is situated within the Green Belt and facilities currently have temporary permissions (albeit to 2035).
- 3. A MRF was recently built at Binnegar Quarry, near Wareham. This has advantages being an existing facility. However its rural location, some distance from the conurbation, would provide disadvantages and it is outside the broad area shown on Figure 6.

#### **Key Sustainability Issues**

- A MRF would enable increased recycling and assist in driving waste up the waste hierarchy.
- Building a MRF in Dorset would reduce the movement of waste and therefore have an overall positive impact on highway congestion and air quality.
- There may be negative impacts locally around any new facilities including impacts from vehicles moments, landscape, biodiversity, amenity and quality of life.

## **Question 8**

Do you have any comments on the location and/or land use requirements of a MRF and options suggested?

Do you have any suggestions for alternative sites that could be suitable for a MRF to serve Bournemouth, Dorset and Poole?

## Household Recycling Centres and Waste Management Centres

**5.13** Household Recycling Centres (HRC) and Waste Management Centres (WMC) enable householders to recycle a wider range of materials and bulky items than can be collected. Waste Management Centres (WMC) are where household recycling centres are combined with transfer and bulking up facilities.

**5.14** There are eleven household recycling centres in Dorset, plus one in Bournemouth and one in Poole. These facilities are located in or close to the main towns, providing an important service to local people to recycle and dispose of their rubbish. Growing numbers of people are putting pressure on some of the existing facilities, creating a need for larger sites. In addition, a number of the facilities require upgrading to offer improved accessibility for people. Some sites need to be able to accommodate additional uses such as bulking up, transfer and sorting facilities.

**5.15** Three of the sites, at Blandford, Sherborne and Poole (Nuffield) are classed as waste management centres as, in addition to the household recycling centres, these sites also take residual waste and recyclables, collected from the doorstep, and bulk them up for onward transfer to another facility. The waste management centres in Blandford and Sherborne are working to capacity and there is an urgent need to enlarge or relocate them to accommodate the transfer of residual waste and co-mingled recyclables.

**5.16** Discussions with Dorset Waste Partnership and a review of existing facilities has highlighted which sites in our network of HRCs may need upgrading, extending or replacing during the plan period. Figure 7 provides a broad indication of the areas where facilities are needed. A full sieve exercise to identify potential site options is yet to be carried out. We would welcome stakeholders' views on potential sites particularly where they fall within one of the broad areas identified.

**5.17** The Borough of Poole has recently refurbished its Waste Management Centre at Nuffield. This facility has been built to modern standards with significant capacity and therefore there are no identified needs for additional/replacement HRC's in Poole during the plan period.

**5.18** Bournemouth also has a HRC and transfer facility at Millhams. This site is considered to have sufficient capacity and there are no issues identified with this site or additional HRCs needed in Bournemouth during the plan period.



## Identified Need 2 - Household Recycling Centres (HRC)

## Why?

- Inadequate, outdated facilities exist in certain parts of Dorset
- Expansion is needed on some sites to facilitate the transfer and sorting of waste (see Identified Need 3)

## Where?

- **Dorchester** existing site needs bringing up to modern standards this is unlikely to be achievable on the current site. There is also a need for a transfer facility in Dorchester. HRC and transfer could be separate facilities or could be co-located. Investigate opportunities at Poundbury and more widely around Dorchester.
- **Wimborne** The existing HRC needs bringing up to modern standards, given the encroachment of housing and other businesses, expansion is unlikely to be an option. There could be opportunities for re-locating the HRC to Ferndown.
- **Blandford** The existing HRC has uncertainly of tenure and needs improved facilities, including capacity for bulking up and transfer of recyclables. Investigate opportunities for relocation.
- **Sherborne** The existing site needs to be bigger to facilitate the co-mingled collection, however this is not possible on the existing site. Transfer element could be separated. An alternative option might be to find a site between Sherborne and Blandford to meet the need of both towns.
- **Shaftesbury** The existing site is in a good location but needs bringing up to modern standards and opportunities for expansion should be investigated in order to accommodate wastes from a wider area (including Gillingham).
- **Bridport** The existing site is small and in a poor location. A new site has been found and a planning application recently submitted, if permitted this will provide an urgently required modernised household recycling centre and transfer facility.
- **Christchurch and Wareham** The existing sites need to be brought up to modern standards but this could be achieved on the existing land.

## When?

Throughout the plan period, with some facilities more urgently required.

## What are the land use requirements?

See methodology for site selection

## **Possible Options**

A full sieve exercise and assessment of site options for each of the identified needs will be undertaken, following the methodology for site selection.

#### **Key Sustainability Issues**

- New and/or improved facilities would enable increased recycling and may enable a greater range of materials to be recycled and assist in driving waste up the waste hierarchy.
- Modernising HRCs may improve safety for users
- There will be a range of sustainability issues specific to each individual need this is likely to include, air quality, transport, landscape and biodiversity impacts.
- There may be negative impacts locally around any new facilities including impacts from vehicles moments, landscape, biodiversity, amenity and quality of life.

## **Question 9**

Do you have any suggestions for sites that could be suitable for household recycling facilities in the general areas where a need has been highlighted on Figure 7?

#### **Transfer Stations**

**5.19** Given the rural nature of Dorset, there is a need for facilities where recyclables and residual waste can be taken to be bulked up before onward travel to a MRF or for final disposal in a treatment facility or landfill site. There is a particular need for these facilities in the west of Dorset as currently individual refuse collection vehicles have to travel across the county to the treatment/disposal facilities situated in the east of the county. This is costly and creates additional vehicle movements. In addition to simply bulking up, these facilities could have the ability to carry out basic manual sorting.

**5.20** Figure 7 provides a broad indication of where transfer facilities are needed. A full sieve exercise of potential site options is yet to be carried out. We would welcome stakeholders views on potential sites particularly where they fall within one of the broad areas identified.

**Identified Need 3** - Bulking up/Transfer facilities for recyclables and residual waste. HRC combined with transfer/bulking up facilities known as Waste Management Centres

## Why?

• Insufficient facilities exist in the plan area, particularly in more rural areas.

#### Where?

- Dorchester, either combined with a new HRC or two separate sites if one large site cannot be found.
- Blandford, opportunities may exist on the current site but alternative options should be explored.
- Sherborne, unlikely to be possible at the existing HRC so alternative options needed.

## When?

Throughout the plan period, with some facilities more urgently required.

## What are the land use requirements?

See methodology for site selection

## **Possible Options**

- 1. Extensions to existing HRCs could provide more sophisticated waste management facilities
- 2. New sites on industrial estates, brown field land, other waste management facilities could provide opportunities for co-locating waste facilities.

## **Key Sustainability Issues**

- A network of transfer and sorting facilities across the county will reduce the mileage travelled by refuse collection vehicles helping to reduce congestion and improve air quality.
- There may be negative impacts locally around any new facilities including impacts from vehicles moments, landscape, biodiversity, amenity and quality of life.

## **Question 10**

Do you have any suggestions for sites that could be suitable for bulking up transfer facility in the general areas where a need has been highlighted on Figure 7?

#### **Bulky Waste Treatment**

**5.21** Bulky wastes include hard plastics and soft furnishings such as sofas, garden furniture and bicycles. These tend to be items that are not collected by the local authority and therefore are deposited at household recycling centres. Currently, this type of waste is deposited to landfill as none of the treatment facilities in Dorset used can take these sorts of wastes.

**5.22** There is an identified need to divert bulky wastes from landfill and move them up the waste hierarchy. This is particularly important as Dorset's landfill sites will close during the plan period (see Chapter 7). This issue gives rise to the need for two separate types of facility: storage, bulking up and transfer facilities; and treatment facilities. Treatment facilities would enable sorted bulky waste to be separated into different fractions and shredded to produce a valuable fuel known as Refuse Derived Fuel (RDF) or Solid Recovered Fuel (SRF).

## Identified Need 4 - Bulky Waste Bulking up/Transfer facilities

## Why?

• No facilities exist in the plan area for the separation of this type of waste.

## Where?

• Throughout Dorset

## When?

Throughout the plan period, the need increases when the existing landfill sites close.

## What are the land use requirements?

See methodology for site selection

## **Possible Options**

Opportunities should be considered to co-locate bulky waste transfer facilities with other waste facilities such as;

- Existing HRCs and WMCs particularly where expansion/relocation is being considered through this plan
- Materials Recycling Facilities
- Existing or planned transfer facilities for other types of waste

If opportunities for co-location do not exist, new sites on industrial estates or brownfield land could provide opportunities.

## Key Sustainability Issues

- The development of bulky waste transfer facilities will assist in diverting waste from landfill and moving waste up the waste hierarchy
- There may be negative impacts locally around any new facilities including impacts from vehicles moments, landscape, biodiversity, amenity and quality of life.

#### Identified Need 5 - Bulky Waste Treatment Facilities

#### Why?

No facilities exist in the plan area for the treatment of bulky waste

#### Where?

• Throughout Dorset

#### When?

Throughout the plan period.

#### What are the land use requirements?

See methodology for site selection

#### **Possible Options**

- Opportunities should be considered to co-locate bulky waste treatment facilities with other waste facilities
- New sites on industrial estates or brownfield land could provide opportunities.
- Consider if suitable facilities exist outside Dorset that have surplus capacity and could meet this need.

## **Key Sustainability Issues**

- The development of bulky waste treatment facilities will assist in diverting waste from landfill and moving waste up the waste hierarchy. If a facility is developed in Dorset there would be benefits as vehicle movements would be reduced thereby improving air quality.
- There may be negative impacts locally around any new facilities including impacts from vehicles moments, landscape, biodiversity, amenity and quality of life.

# **Question 11**

Do you have any suggestions for sites that could be suitable for a bulky waste transfer and/or treatment facility?

# 6 Organic Waste

## **6 Organic Waste**

**6.1** Organic waste for the purpose of this plan comprises food waste and green waste. Organic waste comes from both the municipal and commercial and industrial waste streams.



**6.2** Green waste includes garden waste collected from homes and taken to household recycling centres, as well as waste from the maintenance of public parks and gardens. Food waste is considered where it is separated from other waste. For municipal waste this is primarily through kerbside collections of separated food waste. Similarly for commercial and industrial waste, separate collections of food waste take place by independent collection companies. Food waste collections consist of cooked and uncooked food. The

collections consist of cooked and uncooked food. The waste needs to go through a process to heat it to a high temperature. <sup>(15)</sup> It is therefore collected separately to green waste.

**6.3** As biodegradable materials, organic wastes should be diverted from landfill wherever possible and can be composted or managed by other methods of waste treatment, such as anaerobic digestion.

**6.4** This section provides a summary of the existing facilities that deal with organic waste in Dorset, how and why the quantities of organic material collected might change over the plan period and what facilities will be needed to facilitate these changes.

## **Current Facilities for the Treatment of Organic Materials**

**6.5** There are seven facilities which currently treat organic waste in the county, through composting or anaerobic digestion. There are two facilities, operated by Eco Sustainable Solutions, that primarily manage food waste: an anaerobic digestion plant located at Piddlehinton, near Dorchester, and an in-vessel composting facility at Parley. An additional anaerobic digestion plant has been permitted at the same site on Parley which will provide additional capacity for local authority collected and commercial food waste to the in-vessel composting facility. These three facilities will deal with food waste collected by the Dorset Waste Partnership as Recycle for Dorset is rolled out.

**6.6** There are also two on farm anaerobic digestion plants in the county, one near Dorchester and one in Blackmore Vale, which accept a small proportion of food waste along with agricultural waste. There are also two open windrow composting sites at Parley and Downend Farm which deal with green waste, plus a Mechanical Biological Treatment plant at Canford which composts suitable material recovered from general waste brought to the site.

<sup>15</sup> The processes that handle food waste need to be compliant with the Animal By-Product Regulations (ABPR).





**6.7** Capacity from permitted sites for organic waste treatment is estimated to be around 150,000tpa. Annual throughput at existing facilities is around 120,000tpa, suggesting there is currently some spare capacity at existing facilities.

## How things might change

**6.8** How we deal with organic waste will be changing over the next few years, primarily as this element of the municipal and commercial and industrial waste streams starts to be collected separately to general (residual) waste. A chargeable green waste collection is already offered to households in Bournemouth, Dorset and Poole, but Bournemouth, Poole and some parts of Dorset do not currently have a separated food waste collection. However, all of the Dorset districts will have food waste collected separately by 2015 as part of Recycle for Dorset. Bournemouth and Poole might also introduce a food waste collection service during the plan period. This means that the proportions of the different elements of municipal and commercial and industrial wastes will be changing, and we will need to account for an increased amount of organic waste to be dealt with at our facilities.

**6.9** Estimates have been made as to when separate collections will begin and how much organic waste will be captured over the plan period. We can then make an assessment of whether the existing composting and/or anaerobic digestion facilities in the county will be able to cope with the increased tonnage of organic waste being collected during the plan period.

**6.10** For municipal waste, the Dorset Waste Partnership has provided projections of the estimated amount of food and green waste that will be collected annually to 2018, amounting to around 30% of the total arisings by 2018. Beyond 2018, we have assumed that arisings in food and green waste will remain at 30% of the total municipal waste arisings for Dorset. We have projected this amount per annum as a proportion of the overall growth in municipal waste arisings in Dorset (1% per annum, as set out in Chapter 3).

**6.11** Green waste is currently collected by the Borough of Poole and, given the number of households that have already taken up this service, there is not thought to be scope to increase tonnages. Therefore we have assumed that arisings of green waste for Poole will remain constant over the plan period. Food waste collection is expected to start in Poole during the early part of the plan period and, for the purposes of this assessment, we have assumed that the 'capture rate' will comprise a maximum of 31% of household refuse arisings. This is the amount of food waste that is currently disposed of within black bins. In reality, the capture rate may start at a lower proportion as residents get used to the collection and could increase to 31% during the plan period.

**6.12** Green waste is also collected by Bournemouth Borough Council. It is estimated that arisings could increase over the plan period as more households take advantage of this service. We have projected a 1% per annum increase in arisings for the first 4 years, followed by a 0.5% increase per annum for the rest of the plan period. Food waste collection in Bournemouth is likely to begin in 2015 and it is estimated that between 5000 and 7000 tonnes per annum of food waste will be collected. For the purposes of this assessment, the higher figure of 7000 tpa has been used from 2015 to the end of the plan period.

**6.13** Overall, this equates to total organic waste arisings from the three authorities amounting to 77,600 tonnes in 2014 and increasing to 118,600 tonnes in 2030.

**6.14** For commercial and industrial waste, we have estimated the proportion of organic waste within this waste stream as 12%. This is based on the national Commercial and Industrial Waste Survey (Defra 2011) which looked at the composition of commercial and industrial wastes. It should be noted that this 12% of the total C&I waste arisings is the organic waste that exists in this waste stream. For the purposes of this assessment we are assuming that this could all be captured and dealt with separately, although in reality this may not be achieved.

**6.15** We have therefore projected 12% per annum of the total C&I waste arisings will be organic waste. This equates to 64,500 tpa of organic waste arisings from C&I waste, which remains constant over the plan period as we are assuming a 0% annual growth rate in total C&I waste arisings.

**6.16** In summary, significantly increased quantities of organic waste, mainly comprising food waste, will be collected and will need to be managed in Dorset.

## **Summary of Assumptions**

- From 2018, 30% per annum of Dorset's municipal waste arisings will be organic. •
- From 2015, 31% per annum of Poole's municipal waste arisings will be food waste.
- From 2015, 7000tpa of food waste will be arising in Bournemouth.
- Green waste arisings in Bournemouth will increase by 1% per annum from 2014-2018 and by 0.5% per annum from 2019-2030.
- Green waste arisings in Poole will remain constant at 0% growth per annum from 2014-2030.
- 12% of C&I waste arisings per annum (64,500 tonnes) will be organic

## **Current Capacity and Potential Shortfalls**

6.17 The organic materials arising from the municipal waste steam need to be added to those arising from the commercial and industrial waste stream to determine the overall projected arisings in organic waste. This amount equates to how much waste management capacity is needed to deal with this type of waste. This has been calculated at four intervals over the plan period and is shown in Table 5.

6.18 Table 5 also shows the permitted capacity of existing facilities to deal with organic waste. A comparison between need and capacity demonstrates that there will be a shortfall in capacity of between 25,000 tpa and 30,000 tpa during the plan period. It is notable that this shortfall arises from 2016, which is after the food collections for the three local authorities are introduced.

	2014	2016	2019	2027
Need (tpa)	142,182	178,110	179,916	182,263
Permitted capacity (tpa)	152,700	152,700	152,700	152,700
Identified Surplus/Shortfall (tpa)	10,218	-25,410	-27,216	-29,563

Table 5 Organic Waste Management Capacity and Need

Our assessment of future arisings has assumed high capture rates of organic waste 6.19 for both local authority collected and C&I waste in order to ensure there is not an under provision. The identified shortfall may however be less, if the assumed capture rates are not in reality achieved.

#### What is the identified need?

**6.20** The box below sets out some of the initial options to be considered to deal with any shortfall in capacity for organic waste management.

## Key Issue - Organic waste

Separate food waste collections will require suitable facilities, such as anaerobic digestion plants, particularly if organic waste arisings increase from the commercial and industrial sector.

How can we best provide for a network of facilities in the county taking into account proximity to organic waste arisings?

Identified Need 6 - Facilities for the treatment of organic waste

#### Why?

Identified shortfall in treatment capacity during the plan period. The shortfall in
organic waste treatment capacity is relatively small and, as mentioned, may in reality
be less than estimated. However, treatment of organic waste should be encouraged
in order to move waste up the waste hierarchy.

#### Where?

The county is generally well served with small scale and larger more strategic facilities for treating organic waste. There is therefore no clear location where a specific need has been identified.

#### When?

Monitoring will be required to assess actual capture rates of food waste as the collections are rolled out throughout the plan area. This will highlight when facilities may be needed. The industry may also identify a market need as the capture of organic materials from the C&I waste stream improves.

#### What are the land use requirements?

Land use requirements vary depending on the management method (composting or anaerobic digestion) and scale of operation - See methodology for site selection

#### **Possible Options**

There are no specific identified needs and therefore no options identified at this stage. However, should a company wish to promote a site for an organic waste treatment facility to meet some of this shortfall, allocation within the Waste Plan could be considered (see Chapter 13). Sites are very unlikely to come forward unless the industry thinks there is prospect of capturing enough waste to run a facility.

Unless further information or monitoring highlights a need during the preparation of the Waste Plan, it is likely that a criteria based policy will suffice in order to consider proposals that come forward for the treatment of organic waste and to ensure that there is sufficient capacity for treating organic waste in the county.

#### Key Sustainability Issues

- If needed, new facilities for the treatment of organic waste would assist in driving waste up the waste hierarchy.
- Treatment facilities may provide opportunities for the generation of energy.
- There may be negative impacts locally around any new facilities including impacts from vehicles moments, landscape, biodiversity, amenity and quality of life.

## **Question 12**

Do you have any comments on the need for treatment facilities to manage organic waste?

Do you agree that the potential shortfall in organic waste treatment capacity should be dealt with through a criteria based policy?

# Waste Plan Issues Paper

# 7 Residual Waste

## **7 Residual Waste**

**7.1** The term residual waste refers to waste that cannot be or is not separated for recycling, composting or treatment. This could include various plastics, items made of two or more types of material that cannot be separated, disposable nappies and pet waste.

**7.2** This section provides a summary of the existing facilities that deal with residual waste arisings in Dorset, how and why the quantities of residual waste collected are thought to change over the plan period and what will be needed to facilitate these changes.

## **Current Facilities for the Management of Residual Waste**

**7.3** There are two main management methods for residual waste: landfill and treatment. Waste management in Dorset has historically been reliant on landfill disposal of all waste types, however waste treatment is playing an increasingly bigger part in the management of residual waste, moving waste up the waste hierarchy.

**7.4** There are two non-hazardous landfill sites in the county, Trigon near Wareham and Beacon Hill at Corfe Mullen. Trends on annual waste inputs and discussions with the site operators have indicated that there is between 7 and 9 years of remaining capacity based on current rates of filling. It is possible that void capacity may last slightly longer than this as the amount of residual waste decreases through increased recycling and the separation of organic waste. Planning permission for both sites is due to expire within the plan period and neither operating company currently consider there will be a need to extend these permissions.

**7.5** Additionally, Dorset exports a proportion of its residual waste to Dimmer landfill site in Somerset and Blue Haze landfill site in Hampshire under contracts which are due to end in 2016. Both of these sites are situated close to the border with Dorset. For the purposes of our needs assessment it has been assumed that Dorset will continue to send a consistent, albeit small, quantity of waste to Dimmer throughout the plan period but that Blue Haze will close towards the end of the plan period and movements with cease.

**7.6** There is currently only one facility in Dorset that treats non-hazardous residual waste. This is a Mechanical Biological Treatment plant at Canford Magna. This strategic facility is co-located with other facilities including a MRF and inert recycling facility. A Low-Carbon Energy facility was also recently permitted on this site. Once built this facility will utilise feedstock derived from waste, that cannot readily be recovered for recycling or composted at the MBT plant. DWP and Bournemouth Borough Council have contracts for waste treatment at the MBT facility.

Marchwood Energy from Waste Facility, Hampshire



**7.7** Residual waste arising in Dorset is also sent for treatment out of the county. Dorset has a contract to send a relatively small proportion of waste to the Marchwood energy from waste facility near Southampton in Hampshire. This facility has capacity to continue to deal with this waste up to the end of current contact arrangements and beyond.

**7.8** Residual waste arisings from Poole are bulked up at Nuffield Waste Management Centre and then transferred for final disposal at Trigon Landfill Site or diverted to an energy from waste facility in Slough. The existing contracts for use of the energy from waste facility in Slough were put in place to meet Poole's obligations under the European Landfill Directive to divert waste away from landfill. This contract will end during the plan period and it is assumed that this movement will cease with the end of the contract in 2019 or 2027. The use of this facility does not sit well with the proximity principle.

**7.9** Residual waste arisings from the commercial and industrial stream utilise the two landfill sites in Dorset, the MBT facility and other facilities outside of Dorset. Contracts for the management of commercial and industrial waste are usually more short-term in nature than long term local authority contracts and waste from this stream tends to travel further.



Figure 9

#### How things might change

**7.10** Residual waste arisings in Bournemouth and Poole are assumed to mirror the 0% growth in overall waste arisings. However, given that food waste is soon to be collected separately (see Chapter 6: 6 'Organic Waste'), we have assumed that residual waste arisings will reduce by this amount.

**7.11** Detailed projections have been provided by DWP for Dorset's residual waste, taking into consideration the impact of the new collection system. These projections see total waste arising increasing, however, the proportion of residual waste being landfilled and sent for treatment steadily decreases as recycling and organic food waste collection increases.

**7.12** For the purposes of this plan it is assumed that the levels of residual waste from the commercial and industrial sector will reduce during the plan period to take account of the separation of organic waste (at an assumed capture rate of 50%). If greater levels of organic waste is recycled then residual waste arisings will be lower than assumed, but this approach ensures that we do not under provide for residual waste.

## **Summary of Assumptions**

- 0% growth in local authority collected residual waste in Bournemouth and Poole throughout the plan period
- There will be decline in local authority collected residual waste in Dorset during the plan period
- 0% growth in residual waste from the commercial and industrial stream throughout the plan period
- Overall, Commercial and Industrial Waste arisings will remain constant but the levels of residual will reduce due to the collection of organic waste.

## **Current Capacity and Potential Shortfall**

**7.13** Based on the assumptions set out above, table 6 shows that the need for facilities for the management of residual waste decreases in the early part of the plan period given the diversion of organic waste from the residual waste stream.

**7.14** The table also shows the permitted capacity of existing facilities to manage residual waste and the implications of the closure of Dorset's non-hazardous landfill sites and the end of existing contracts with treatment facilities outside of Dorset.

**7.15** A comparison between need and capacity, undertaken at four intervals, demonstrates that without new facilities there will be a shortfall in capacity, this is particularly significant towards the end of the plan period.

	2014	2016	2019	2027
Need (tpa)	305,398	277490	279540.4	282,359
Capacity (tpa)	295,995	295,995	214,830	104,000
Identified Surplus/Shortfall (tpa)	-9402	18,505	-64,711	-178,259

#### Table 6 Residual Waste Landfill and Treatment Capacity and Need

## Key Issue - Residual waste

In Bournemouth, Dorset and Poole, landfill capacity is diminishing and treatment capacity for, residual waste within the county, is insufficient to meet our needs, particularly towards the end of the plan period.

How do we meet the identified need for facilities to deal with Bournemouth, Dorset and Poole's residual waste arisings, taking into account the waste hierarchy?

**7.16** With the exception of MSW, data on waste arisings is poor and forecasting waste arisings for all waste streams is difficult to predict. Therefore the significant shortfall in capacity identified towards the end of the plan period may, in reality, not materialise. Waste reduction initiatives and economic conditions may drive greater reductions in waste arisings and increased levels of recycling that could not have been predicted. However, the identified shortfall is potentially serious and options for meeting the needs of Dorset should be considered through this plan.

**7.17** Options for additional landfill are limited. The operators of the two existing landfill sites are understood not to be seeking extensions. Although there are a number of existing quarries in the county there are no obvious future landfill sites, as most will be unacceptable for non-hazardous waste for various reasons including landscape, bird strike, transport and because of the risk to surface and groundwater. In addition, the cost of landfill will increasingly become prohibitive. Whilst the lives of the existing landfill sites could be extended through increased recycling this would be limited and would require extensions to planning permission end dates. In any case, we should seek to move waste up the waste hierarchy and move away from landfill.

**7.18** There may be the option to export future residual waste to treatment facilities outside Dorset. The Waste Infrastructure Delivery Programme (WIDP) was set up to address the expected shortfall in residual waste treatment capacity needed in order for England to meet its share of the UK's Landfill Directive targets. As part of monitoring progress towards meeting EU Landfill Directive targets, it has been estimated that sufficient residual waste treatment

infrastructure is coming forward to meet our Directive obligations. Other reports suggest that constructing new waste processing plants is held back because of a lack of available finance, which could have an impact on treatment capacity.

**7.19** The capacity of facilities for the treatment of residual waste in England, particularly in the south, will be kept under review. If it appears that there are facilities with surplus capacity that could deal with Dorset's residual waste, this option will be considered in the context of cost and impacts of transporting waste. Whilst this does not sit well with the aim of self sufficiency, it makes little sense to build additional facilities where existing facilities have surplus capacity.

**7.20** The opportunity for additional treatment facilities in Dorset should not be ruled out. However, the estimated shortfall in capacity during most of the plan period would be unlikely to justify a new facility in Dorset. Given the relative uncertainties in predicting waste arisings a criteria based policy for dealing with applications for residual waste treatment facilities could be more appropriate than searching for a site for a waste facility that may not be needed. This approach would require commitment to monitoring and if a pressing need emerged a potential review of the Waste Plan. Whichever approach is taken, it is considered that any policies or site specific allocations should be technology neutral and flexible enough to allow the range of different technologies that may come forward during the life of the plan.

**7.21** It should also be noted that, based solely on local authority collected residual waste arisings, in the three authorities, there is sufficient capacity throughout the plan period. Without a local authority need, and therefore local authority funding, it may be difficult to deliver a new site for residual treatment facility in Dorset through the Waste Plan.

**7.22** An issue that has been identified is the long term uncertainty over the only residual waste treatment facility in the county - the MBT plant in Poole operated by New Earth Solutions. This facility and other waste facilities on the wider site, known as the 'Site Control Centre', is situated in the South East Dorset Green Belt. To date waste developments have been restricted to temporary planning permissions. However, the MBT plant and other waste operations have recently secured extension to their permissions from 2027 to 2035. Although this is well beyond the end of the plan period the site is considered to be of strategic importance for Dorset, Bournemouth and Poole's long term waste management needs and the Waste Plan should recognise this.

## What is the Identified Need?

**7.23** The box below summarises the initial options for dealing with residual waste. We would welcome stakeholders' views on these options.

#### Identified Need 7 - Facilities for the Management of Residual waste

#### Why?

- Limited and reducing non-hazardous landfill void space for residual waste
- Limited treatment capacity for residual waste in Dorset

#### Where?

As the need for this facility is driven by Bournemouth, Dorset and Poole, any new facility needs to be strategically located in the County. Given that Dorset is a rural authority and the largest quantities of waste will be derived from in and around the conurbation this would be the most likely location for such a facility.

However, facilities for the management of residual waste could be located outside of the county if capacity is available.

#### When?

Facilities will be required throughout the plan period.

#### What are the land use requirements?

Land use requirements vary depending on management method and scale of operation -See methodology for site selection

## **Possible Options**

- 1. Rely on landfill sites outside of Dorset
- 2. Rely on existing treatment facilities in Dorset, Hampshire and further afield
- 3. Identify additional non-hazardous landfill void space within Dorset
- 4. New facilities for the treatment of residual waste including the opportunities to generate heat and power in Dorset
- 5. A combination of the above options

## **Key Sustainability Issues**

There will be a range of sustainability issues specific to each option including air quality, transport, landscape and biodiversity. If new facilities are required there will also be negative impacts locally including impacts from vehicles moments, landscape, biodiversity, amenity and quality of life.

Economic considerations might be key in determining the most sustainable option given the increasing cost associated with sending residual waste to landfill and initial costs of constructing waste treatment facilities.

If there is a reliance on exporting waste there would be impacts associated with the transportation of waste.

Waste Plan Issues Paper

# **Question 13**

Do you have any comments on the options set out for managing residual waste?

Given the evidence presented how should the potential shortfall in residual waste treatment capacity be dealt with through the Waste Plan?

# 8 Inert Waste

## 8 Inert Waste

**8.1** Inert waste comes primarily from the construction, demolition and excavation waste stream. It also arises in the municipal and commercial and industrial waste streams, particularly through disposal by residents of rubble and similar materials at the household recycling centres.

**8.2** This section provides a summary of the existing facilities that deal with inert materials in Dorset, how the quantities of inert waste arisings might change over the plan period and what facilities will be needed to facilitate these changes.



#### **Current Facilities for the Management of Inert Waste**

**8.3** Dorset has a relatively good network of facilities for managing inert waste materials, comprising both recycling operations and landfill sites.



#### Figure 10

**8.4** Inert landfill sites tend to be within quarries and provide an important function in their restoration. There are currently ten sites with permission for inert landfill and a total void capacity of over 2 million m<sup>3</sup>. This figure includes permitted but not operational sites. A more realistic void capacity has been estimated as around 1.7 million m<sup>3</sup>. Estimated annual input in Dorset is around 118,000m<sup>3</sup>.

**8.5** Based on the current input rate, the existing landfill capacity will have a life of around 15 years. Realistically many of the permitted sites have relatively short end dates and the Waste Planning Authority anticipates applications to extend the life of a number of sites. However, there may be a need for additional inert fill capacity towards the end of the plan period. The existing void capacity may last longer if the amount of inert material diverted from landfill to recycling facilities increases. This will need to be monitored during the plan period.

**8.6** Dorset has nine inert recycling facilities, some of which are co-located with other treatment facilities such as at Canford Recycling Centre, Downend Farm and Eco Sustainable Solutions, Parley. The majority are located at old quarries alongside inert landfill sites and have temporary planning permissions linked to the restoration of these sites. Existing capacity is around 480,000tpa, whilst annual throughput is around 200,000tpa, suggesting there is currently significant spare capacity at existing facilities.

## How things might change

**8.7** We are not expecting to see significant changes in arisings of inert waste over the plan period. Inert waste is primarily derived from the construction, demolition and excavation waste stream and we are assuming that arisings in CDE waste will remain constant over the plan period (as explained in Chapter 3).

## Assumption

Inert waste arisings will remain constant over the plan period = 0% growth per annum

## **Current Capacity and Potential Shortfall**

**8.8** Arisings are difficult to estimate for CDE waste because a large proportion is dealt with outside of waste management facilities. Since we are only planning for inert waste that needs to be dealt with through our waste management facilities, the amount of inert waste currently managed will be used as a basis for our projections.

**8.9** The current amount of waste managed is that received at inert landfill sites together with that received at inert recycling facilities. On average, this equates to around 355,000tpa. This will be the annual need for inert waste capacity over the plan period, since we are assuming 0% growth in arisings. This is well below current capacity for inert recycling and below the available capacity for inert treatment and landfill combined. Looking at the two types of waste management facility separately, there is sufficient capacity in the medium term for inert landfill and an excess of annual capacity for inert recycling. In addition, some inert waste arising in the south east of Dorset is likely to be dealt with in facilities across the border in Hampshire, and vice versa.

**8.10** As discussed above, the existing landfill sites have varying end dates and a proportion of the recycling capacity is time limited. The situation, particularly in relation to inert landfill, will change early in the plan period unless extensions are granted.

**8.11** Inert materials arising from construction, demolition and excavation waste tend to be disposed of at the closest facility to where they arise, whether this is a recycling facility or a landfill site. It is important to encourage the establishment of recycling facilities to ensure that facilities are available to maximise recycling and move waste up the waste hierarchy. Not all inert material can be recycled and there will remain some need for landfill availability. There will also remain a need for inert materials that cannot be recycled to be used in the restoration of quarries. Restoration is likely to provide the right opportunity for dealing with such waste.

**8.12** It is therefore considered appropriate for the Waste Plan to aim to facilitate a network of inert waste facilities across the county to provide local disposal options.

**8.13** Proposals for inert recycling facilities will be considered against the Bournemouth, Dorset & Poole Minerals Core Strategy. Policy RE1 - Production of Recycled Aggregates sets out criteria against which proposals can be considered. The policy particularly encourages facilities in the west and north of the county, areas less well served by such facilities.

**8.14** The Waste Plan therefore only needs to deal with inert landfill. It is considered that a criteria based policy will be sufficient to consider proposals that come forward, including extensions to time of existing permitted sites. As we are aiming to encourage more recycling of inert materials, proposals for inert landfill would need to demonstrate a need for the site.

# Key Issue – Inert waste

How do we provide for sufficient capacity for the management of inert waste generated throughout the plan period, ensuring that wherever possible materials are recycled in the first instance and that the spatial distribution of facilities provides local recycling and disposal options?

**Identified Need 8** - No specific need has been identified for facilities to manage inert waste. However, the spatial distribution of current facilities indicates a lack of infrastructure for this type of waste in the north and west of the county.

## **Key Sustainability Issues**

- New aggregates recycling facilities would increase recycling, reduce the need for primary aggregate and assist in driving waste up the waste hierarchy.
- Local facilities throughout Dorset would reduce the movement of waste and therefore have an overall positive impact on highway congestion and air quality.
- There may be negative impacts locally around any new facilities including impacts from vehicles moments, landscape, biodiversity, amenity and quality of life.

# **Question 14**

What do think about the concept of localised facilities for dealing with inert materials?

Are you aware of any specific needs or constraints to existing capacity?

Are there any specific sites that you think should be considered for inert waste disposal?

# Waste Plan Issues Paper
# 9 Other Wastes and Facilities

# 9 Other Wastes and Facilities

**9.1** The previous chapters have dealt with the major wastes that arise and are managed in Dorset. There are other waste streams which the Waste Plan must consider and include guidance for dealing with future proposals and, if necessary, identify site specific allocations.

# Specialist Waste Management - Hazardous Waste

**9.2** A small amount of Dorset's waste is classified as hazardous. Such waste comes from a range of everyday activities and sources including industry (for example oils, chemicals and paints) and the healthcare sector (for example clinical wastes) and households (for example batteries and Waste Electronic and Electrical Equipment). Such waste is treated in specialist recycling, recovery or treatment facilities and some is disposed of in landfill sites.

**9.3** Hazardous waste facilities generally deal with waste from a wider catchment than other facilities, as they are more specialist in nature. It is not necessarily appropriate to try to plan for self-sufficiency when it comes to the management of hazardous waste.

**9.4** There are two hazardous waste treatment facilities operating in the plan area. There are no hazardous landfill sites.

**9.5** A clinical waste incinerator in Bournemouth currently manages waste from Dorset and Hampshire. Although this facility is working close to capacity, discussions with the operator suggest that any increased need could be met through new plant as opposed to additional land take. There is also an oil and water treatment facility in Shaftesbury. The operator has suggested that this facility is currently working under capacity.

**9.6** There are a number of facilities outside Dorset which deal with Dorset's hazardous waste. Around 25,000 tonnes of hazardous waste arising in Bournemouth, Dorset and Poole was exported in 2011. This could include waste from hazardous waste transfer stations in the county and so may not have truly 'arisen' in Dorset. Of the 25,000 tonnes, the highest quantity of hazardous waste exported was oil/oil and water mixtures, comprising around 25% of the total. Other hazardous wastes exported in quantities over 1000 tonnes included solvents, non-defined hazardous waste and hazardous waste contained within municipal and commercial and industrial waste.

**9.7** A criteria-based policy should be included in the Waste Plan to deal with applications for hazardous waste treatment facilities, should the need arise. There is currently no identified need for a specific allocation. The available capacity of hazardous waste facilities outside of Dorset will need to be considered as part of the preparation of the Waste Plan and monitored regularly.

**9.8** The policy will need to address the implications for land use and environmental impact of different types of hazardous waste facilities, which can be different in character to non-hazardous waste treatment facilities and to each other.

# Wood Recycling

**9.9** Dorset currently has two wood recycling facilities; Downend Farm near Blandford and Eco Sustainable Solutions, in Parley. A biomass plant has also recently been permitted at the Parley site to treat the residual wood once recycled.

**9.10** Permitted capacity for wood recycling is estimated to be over 56,000tpa, whilst annual throughput is around 40,000tpa. This will increase once the biomass plant at Parley becomes operational. Given these figures, it is considered that sufficient capacity exists to deal with wood waste arising in the plan area. Although we have not made assumptions on how wood waste arisings are likely to change during the plan period, capacity in permitted facilities will allow for flexibility.

**9.11** It is suggested that a criteria based policy for dealing with this type of recycling facility be included in the Waste Plan to assess applications as they arise.

# **Radioactive waste**

**9.12** The existing Waste Local Plan does not cover the management of radioactive waste. This has been raised as an issue that needs policy guidance in the revised plan.

**9.13** Radioactive waste is produced in the UK from both nuclear industry and non-nuclear industry sources, including through the use of radioactive materials in industry, from the extraction of naturally occurring radioactive materials, and in medicine and research. It is essential that all radioactive wastes and materials are safely and appropriately managed in ways that pose no unacceptable risks to people or the environment.

**9.14** Radioactive waste is divided into three main categories according to its radioactivity content and the heat it produces. These categories are:

- High Level Waste (HLW) waste that contains sufficiently high levels of radioactivity that heat is generated. It is generated as a by-product from the reprocessing of spent fuel from nuclear reactors. Approximately 0.1% of radioactive waste produced in the UK is HLW. This arises only at Sellafield, in Cumbria, where it is cooled and vitrified for intermediate storage. The Government believes the best way to deal with it is through a deep Geological Disposal Facility.
- Intermediate Level Waste (ILW) contains higher concentrations of radioactivity than low level waste, but without the heat generation that occurs in high level waste. Like HLW, the Government believes the best way to deal with ILW in the longer term is through deep geological disposal. Intermediate storage of ILW will take place at specialist facilities until a Geological Disposal Facility is available.
- Low Level Waste (LLW) is that which is within a specified concentration of radioactivity and does not normally require shielding during handling or transport. However it may require specifically designed containment. These wastes may arise from the non-nuclear and nuclear industries and typically consist of everyday items that have become contaminated during use by contact with radioactive materials. Disposal of low level waste requires permitting under environmental regulations. Higher Activity LLW that is unsuitable for landfill can be dealt with at specialised 'near-surface' disposal facilities

such as the UK's Low Level Waste Repository (LLWR) near Drigg in West Cumbria. Low Activity LLW does not need the highly engineered containment systems that are provided by the LLWR and can be sent to suitably permitted, conventional, non-inert landfills.

 Very Low Level Waste (VLLW) - this is a sub-category of low-level waste that mainly arises from non-nuclear industries such as hospitals, universities and industrial premises. VLLW has such low concentrations of radioactivity that low-volume disposal can be handled through conventional disposal / landfill sites (and thus does not need to be explicitly and separately addressed in local plans), although higher volumes require permitting under environmental waste regulations.

**9.15** The largest sources of radioactive waste within the County are generated from the Wytch Farm oilfield and the decommissioning of the Winfrith nuclear research and development facility. Small amounts arise from hospitals but are dealt with at the clinical waste incinerator. Naturally Occurring Radioactive Materials (NORM) deep underground affect drilling equipment at Wytch Farm. Such equipment is currently decontaminated at a Dorset-based facility.

**9.16** Winfrith is a Nuclear Licensed Site operated by Research Sites Restoration Limited (RSRL), under contract to the Nuclear Decommissioning Authority (NDA). RSRL is currently consulting on the programme for restoration. The objective of RSRL is to safely manage the decommissioning of facilities at Winfrith and to enable release of the land by 2021.

**9.17** RSRL produces radioactive waste from decommissioning operations. The radioactive waste primarily consists of contaminated concrete, metals and plastic. RSRL applies Best Available Technique (BAT) to minimise, segregate and treat radioactive waste on-site prior to considering off-site treatment or disposal. Where radioactive waste generation cannot be avoided or minimised at source, it will be disposed of in accordance with the National Low Level Waste (LLW) Strategy, which advocates the principles of the waste hierarchy to: avoid, re-use, recycle, minimise and dispose. The NDA has a service framework with the Low Level Waste Repository (LLWR), located in Cumbria, to implement the National Strategy and provide a coordinated national service to manage the disposal of LLW. Through the service framework RSRL can access a variety of treatment and diversion facilities that minimise the reliance on the national LLW repository.

**9.18** Intermediate Level Waste (ILW) was produced during RSRL's operational lifetime. The major components of ILW are metals with lesser quantities of cement, graphite, glass and ceramics. The ILW will be removed from the disused reactors and research facilities as part of the decommissioning process and placed in reinforced concrete boxes. The boxes will then be filled with cement and permanently sealed at the decommissioning site creating

a solid concrete box. These boxes will be transported to the new ILW store at Harwell in Oxfordshire and will remain there until the national Geological Disposal Facility becomes available. <sup>(16)</sup>

**9.19** Capacity for the management of LLW has been considered nationally. It has been concluded that there is adequate capacity in the existing authorised sites until December 2016 and if extensions to planning consents are obtained for the sites, there is adequate capacity until 2030 <sup>(17)</sup>.

**9.20** However, whilst there is no indication at this stage that the plan needs to make specific provision in the plan period, it would be prudent to include a criteria-based policy which sets out the approach of the Waste Planning Authority towards the disposal of low level waste. This should also address how any proposals would be considered should they come forward. Such a policy should provide the plan with the necessary flexibility to cope with waste needs over the plan period should circumstances change. Under the requirements of the duty to co-operate the Waste Planning Authority will liaise with those planning authorities in receipt of ILW and LLW from Winfrith to ensure that the policy approach we are proposing is compatible with their own plans.

## **Metal Recycling**

**9.21** There are a number of metal recycling sites across the county, as shown in Figure 11. In 2011, facilities in Dorset managed 92,000 tonnes of metal waste. A significant part of this waste is made up from motor vehicles that have reached the end of their useful life. Sites tend to serve a local need and market.

<sup>16</sup> The Department of Energy and Climate Change (DECC) has recently carried out a national consultation on the siting process for the safe disposal of nuclear waste, which confirms that the preferred method is via a Geological Disposal Facility (GDF) deep underground. The process is based upon inviting interest from willing communities nationally to explore the possibility of hosting such a facility. It is anticipated that a GDF would not be operational before 2040.

<sup>17</sup> Low Activity Low Level Waste Capacity Assessment (LLWR 2013)



**9.22** It is not possible or necessary to establish the existing capacity and potential future needs for this type of facility. It is suggested that a criteria based policy for dealing with this type of recycling facility be included in the Waste Plan to assess applications as they arise.

# Waste Water - Sewage Treatment

**9.23** Sewage treatment facilities are in ever increasing demand due to continuing population growth and higher environmental standards. Every household and business produces waste water which requires treatment before being released back into the environment. Responsibility for the provision of sewage treatment facilities and infrastructure in the plan area lies mainly with Wessex Water, although South West Water covers a small area in the west. The county has a network of waste water treatment facilities across the county. Most of the facilities are small in scale but there are three strategic sewage treatment plants.

**9.24** The treatment of waste water in sewage treatment works results in the production of sewage sludge which is a biodegradable, odorous liquid that contains roughly 4% solid matter. Responsibility for disposal of this sludge lies with the water companies. The arisings of dry sewage solid in the plan area is around 21,000 tonnes per annum, which equates to approximately 500,000 tonnes of wet sewage sludge per annum.

**9.25** Wessex Water has predicted that these annual figures are likely to grow by approximately 4% over the period to 2020 and have indicated that various sites within Dorset may require expansion within the Plan period due to this anticipated growth. These sites are highlighted on Figure 12. However, the need for physical expansion may not be necessary as advances in technology enable better use of existing sites. Further discussions will be needed with the water company to understand if it would be beneficial to allocate land for extensions. Otherwise, it is suggested that a criteria based policy for dealing with extensions to existing sewage treatment plants could be included in the Waste Plan to assess applications as they arise. This policy should also cover new facilities, however discussions with the water companies have indicated that there are unlikely to be any proposals for new facilities during the plan period.



Figure 12

# Waste from New Developments

**9.26** In order to drive waste up the waste hierarchy, the waste implications of all new development must be considered, including, but not limited to, residential, commercial, industrial and waste developments.

**9.27** The level of on-site provision of facilities for the separation or storage of waste should be adequate to meet the needs of the proposed development and the type and amount of waste arising from occupation.

**9.28** On smaller sites, provision might include collection points for segregated waste. On larger sites, particularly where significant areas of new housing or employment land are proposed, waste storage facilities will almost always be needed and provision might also include on-site treatment facilities such as community composting, anaerobic digestion forming part of a district heating system or, in the case of industrial operations, the management of specific wastes produced on site.

**9.29** Consistent with the updated national waste planning policy, the Waste Planning Authority is committed to a co-ordinated approach with the district and borough councils to consider opportunities for combined heat and power that new large scale development allocations would present. Although opportunities may be limited they will be sought and where appropriate identified through the development of this plan as retrofitting combined heat and power facilities is rarely successful.

**9.30** It is also suggested that the Waste Plan includes a policy to encourage developments to incorporate facilities that allow occupiers to separate and store waste for recycling and recovery. For appropriately sized developments policies should also ensure that full consideration has been given to on-site treatment facilities.

# 10 Development Management & Safeguarding

# **10 Development Management & Safeguarding**

# **Development Management**

**10.1** The National Planning Policy Framework sets out a presumption in favour of sustainable development. This means that development which is sustainable should be approved without delay. The principles of sustainable development, as introduced in Chapter 2, are to meet the needs of the present without compromising the ability of future generations to meet their needs, informed by a combination of economic, environmental and social considerations.Planning should proactively drive and support sustainable economic development whilst seeking to conserve and improve the environment and promote healthy and low-carbon communities.

**10.2** In order to facilitate sustainable development, the Waste Plan will need to include policies against which applications for waste developments will be considered. These policies should enable a judgement to be made on whether a proposed development is an acceptable use of land. They will be about managing the impact of waste management facilities so that their construction and operation does not give rise to an unacceptable impact on any interest of acknowledged importance, including the amenity of residents and the local and wider environment. The policies will need to be consistent with the National Planning Policy Framework and the national planning policy for waste.<sup>(18)</sup>

**10.3** Issues of pollution control are generally dealt with outside the planning system. The pollution control regime implements measures to prohibit or limit the release of substances to the environment to the lowest practicable level, and ensures that ambient air and water quality meet certain standards to protect against adverse impacts to the environment and human health. The Waste Plan should complement the pollution control regime rather than duplicate its requirements.

**10.4** There are a range of matters that could be relevant to a planning application for a waste management facility, depending on its nature, scale and location.

**10.5** At this stage in the preparation of the Waste Plan, we have identified a number of matters that will need to be covered by development management policies. These cover the guiding principles for waste management, discussed in detail in Chapter 2, the locational criteria set out in the updated national waste planning policy and other relevant issues. A summary of each topic and the issues that should be covered in the determination of a waste planning application is set out below. The topics are arranged by the three strands of sustainability; social, economic and environmental, however in practice the issues often cut across all aspects of sustainability.

# **Guiding Principles**

**10.6** Applications for waste developments should demonstrate how they conform with a number of key underlying principles of the Waste Plan. These principles are:

<sup>18</sup> The current national planning policy for waste is Planning Policy Statement 10. An updated national waste planning policy was published for consultation in July 2013 and the final version is expected to be issued shortly.

- How the proposal contributes to moving waste up the waste hierarchy
- How the proximity principle is being met as far as possible through consideration of the source of the waste in relation to the location of the proposed development
- How the proposal contributes to self sufficiency (enabling the county to deal with its own waste) where relevant and practicable

**10.7** Applications may also have to demonstrate that there is a need for a proposal, if it is not consistent with other policies in the plan (as required by the updated national waste planning policy).

# Social & Economic Issues

# **Traffic and access**

**10.8** Waste management facilities can be significant generators of traffic and impact on our highway network is an important consideration in assessing the acceptability of proposed waste developments. Dorset's road network is characterised by a lack of motorways and an extensive network of rural B and C class roads. Use of the strategic road network, comprising trunk roads and other primary routes, along with county distributor roads, should be encouraged for HGVs since such routes are more to be able to satisfactorily accommodate such traffic.

**10.9** The capacity of existing and potential transport infrastructure to support the sustainable movement of waste is an important consideration. Furthermore, the suitability of the road network and the extent to which access would require reliance on local roads should be considered. There may on occasion be alternatives to road transport and such opportunities should be encouraged when practicable and beneficial.

# Amenity and Quality of Life

**10.10** Potential impacts of proposed development on local amenity would typically involve detailed consideration of issues such as (in no particular order): operating hours; noise, dust, vibration, odour, emissions, illumination, visual intrusion, litter, vermin or traffic in relation to adjoining land uses and users and those in close proximity to the development.

**10.11** Generally speaking, measures can be put in place to control the effects of waste operations to acceptable levels through careful siting, landscaping and operational controls. Local policy should therefore ensure that potential impacts on amenity can be avoided or mitigated. Matters such as nuisance, litter and vermin are increasingly being controlled and monitored through the Pollution Prevention and Control regime and Waste Management Licensing.

**10.12** The updated national waste planning policy states that modern, appropriately located, well-run and well-regulated waste management facilities operated in line with current pollution control techniques and standards should pose little risk to human health. Consideration of impacts on health should therefore be in the context of whether the location is appropriate for a proposal. Health can be material to such a decision. The locational implications of any advice on health from the relevant health bodies, such as the Health Protection Agency, should also be taken into consideration.

## **Rights of way**

**10.13** The rights of way network comprises footpaths, bridleways and byways, all of which provide access to the countryside. The overall aim for policy would be that the existing network of public rights of way is maintained. Additionally, the amenity, convenience and recreational value should be protected wherever possible.

## **Co-location and cumulative impacts**

**10.14** The co-location of waste management facilities is encouraged, in accordance with government policy. A broad range of waste management facilities can be combined within the same site, enabling complementary management of different types of waste through different processes. These sites are generally known as resource recovery parks. There are advantages when different types of waste management facilities are located close together or are co-located on one site, such as reducing the transportation of waste to different processing facilities, thereby minimising potential environmental impacts and disturbance to local residents.

**10.15** However, opportunities for co-location may well be determined by other locational factors when considered against the matters highlighted in this chapter. The cumulative impacts of several waste management operations on the same site or in close proximity to each other may be a factor that needs to be assessed when determining a planning application. Whilst there are measures that can be taken to avoid or mitigate cumulative impacts, there may be cases where the consequences of the development either singly or in combination add up to such a severe impact that planning permission should not be granted.

## **Planning Obligations and Contributions**

**10.16** Any development can put pressure on and potentially over-stretch existing infrastructure and services. Measures can be put in place so that the infrastructure and services needed are delivered hand in hand with the development. The way that infrastructure and services are secured (or contributions towards their provision are made) is generally through the use of a legally binding agreement, known as a planning obligation. The National Planning Policy Framework acknowledges the importance of planning positively for the infrastructure required in the area. This might include the infrastructure required to support development, taking into account costs, sources of funding, responsibilities and timescales for delivery, and possible gaps in funding.

**10.17** Such a binding planning obligation may be provided to the Waste Planning Authority by the applicant or developer (or any others that may have an interest in the land) under Section 106 of the Town and Country Planning Act 1990, in order to make a proposed development acceptable. This can be done unilaterally or through agreement, when it is known as a Section 106 agreement. The Waste Plan should contain policy guidance on this matter.

# **Environmental Issues**

# **Design and Sustainable Construction**

**10.18** Good design is a key aspect of sustainable development. National policy suggests that waste management facilities should be well designed so that they contribute positively to the character and quality of the area. Local policy can set out the quality of development expected. Proposals should demonstrate that account has been taken of factors such as landform, the local character and historic environment, layout, building orientation and materials, massing, height and density.

**10.19** Waste management facilities, like any other built development, should also take account of principles of sustainable construction to minimise carbon footprint and use of natural resources, including energy and water. This may include, but is not limited to, the inclusion of renewable energy technology; orientation and layout of buildings to maximise solar and other natural benefits; grey water recycling systems; and integration of sustainable drainage systems.

**10.20** Waste treatment facilities can also provide opportunities in themselves for the generation of renewable heat and power. For example, the anaerobic digestion process produces biogas which can be burnt to generate electricity and, as a by-product, heat. Such opportunities should be taken wherever feasible and will be encouraged through local policy. This might be by providing Combined Heat and Power to a neighbouring development, or could be through a connection to the National Grid. There may also be potential for the proposed development to generate electricity or heat/cooling that supports operation of the facility itself.

## Flood risk and water resources

**10.21** The protection of surface, coastal and groundwater resources is an important consideration in assessing the acceptability of proposed waste developments. Developments can affect water volumes, quality, and direction and rate of flow. Factors such as topography, geology, hydrogeology and hydrology would need to be considered.

**10.22** New development should also take account of flood risk, including where this is expected to increase as a result of climate change. National policy requires that inappropriate development in areas at risk of flooding should be avoided, with development directed away from areas at highest risk through a 'sequential test' approach, but where development is necessary making it safe without increasing flood risk elsewhere.

# Land instability

**10.23** The updated national waste planning policy suggests that locations, and/or their surrounding areas, that are liable to be affected by land instability will not normally be suitable for waste management facilities. Proposals should therefore demonstrate that the site is suitable for its new use taking account of ground conditions and land instability.

### Landscape and Visual Impact

**10.24** Dorset has a diverse landscape with much of the county being designated due to its special quality. Over half of Dorset is Area of Outstanding Natural Beauty, a Heritage Coast designation stretches inland from the coast in Purbeck and much of the coastline is World Heritage Site. Government policy suggests that major developments are not appropriate within AONBs except in exceptional circumstances and where they are in the public interest. Policy will need to give sufficient protection from inappropriate development within designated areas. Impact on local landscapes is also an important issue to be addressed and the loss of local landscape features should be avoided wherever possible.

**10.25** Whilst impact on the landscape is intrinsic, visual impact can be defined as a change in the appearance of the landscape as a result of development, as viewed by a person. Both landscape and visual impacts can be positive or negative.

#### Nature conservation

**10.26** Dorset has a rich and diverse mosaic of habitats, including chalk downland, heathland, ancient woodland, river valleys and coastal habitats. The county contains a wealth of internationally, nationally and locally designated nature conservation areas. This includes a network of 'Natura 2000' sites, comprising Special Protection Areas (SPAs) designated for their bird interests; Special Areas of Conservation (SACs), covering internationally important habitats; and Ramsar sites, wetlands of international importance. Notably, Dorset has 11% of the UK's rare lowland heath, virtually all of which is designated as part of the Dorset Heaths SAC, covering large areas of Purbeck. There are 141 nationally designated Sites of Special Scientific Interest (SSSI) and over 1000 locally designated Sites of Nature Conservation Interest (SNCI).

**10.27** Proposals for waste facilities must not adversely affect the integrity of SPAs, SACs or Ramsar sites. Impacts on other nature conservation interests should be avoided or adequately mitigated. There may also be opportunities to enhance nature conservation interests.

#### Historic environment and built heritage

**10.28** There is a range of significant historic and cultural assets that contribute to Dorset's character and distinctiveness. In considering the 'historic environment' this includes human influence on the landscape, archaeology, historic settlements and buildings. There is a wealth of listed buildings and conservation areas designated to protect our built heritage as well as extensive records of archaeological remains, which include over 1000 scheduled monuments. The significance of such assets and impacts on them is a consideration, as well as impacts on the setting of assets. Consideration of impact on setting may include whether the development can be seen, heard, felt or smelt from an historic asset.

# **Aviation safety**

**10.29** The updated national waste planning policy acknowledges that some waste management facilities, especially landfills which accept putrescible waste, can attract vermin and birds. The numbers, and movements of some species of birds, may be influenced by the distribution of landfill sites and where birds congregate in large numbers, they may be a major nuisance.

**10.30** As part of the aerodrome safeguarding procedure (ODPM Circular 1/20037), local planning authorities are required to consult aerodrome operators on proposed developments likely to attract birds. These can include waste management sites, particularly landfills, and can pose a hazard to aircraft.

## Air Quality

**10.31** The control of emissions from waste management facilities is part of the Pollution Control Regime. However, national policy states that planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas (AQMA) and the cumulative impacts on air quality from individual sites in local areas.

**10.32** Consideration should be given to the extent to which adverse emissions, including dust, can be controlled through the use of appropriate and well-maintained and managed equipment and vehicles. Proposals should demonstrate that emissions can be mitigated to an acceptable level having regard to the proximity of sensitive receptors.

## Odours

**10.33** Odours can also occur through the operation of waste management facilities. Whilst many facilities are now enclosed, thereby mitigating this issue, consideration should be given to the extent to which adverse odours can be controlled through the use of appropriate and well-maintained and managed equipment. Proposals should demonstrate that odours can be mitigated to an acceptable level having regard to the proximity of sensitive receptors.

#### Noise and vibration

**10.34** The operation of large waste management facilities in particular can produce noise both inside and outside buildings. Intermittent and sustained operating noise may be a problem if not kept to acceptable levels and particularly if night-time working is involved. Proposals should demonstrate that noise levels can be mitigated to an acceptable level having consideration to the proximity of sensitive receptors such as dwellings or schools for example. Similarly, it must be demonstrated that vibration as a result of operations or traffic will not have an unacceptable impact on sensitive receptors.

#### **Green Belt**

**10.35** The fundamental purpose of the Green Belt is to prevent urban sprawl by keeping land permanently open between developments. In Dorset, the South East Dorset Green Belt extends over some 168 square kilometres of open land in and around Upton, Wimborne, Ferndown, Poole, Bournemouth and Christchurch and stretching south-west as far as Wareham.

**10.36** A number of strategic waste facilities, including operations at Canford Magna and Eco Sustainable Solutions' operations at Parley are located in the Green Belt. However, the Government's policy is that most new development will be inappropriate in the Green Belt and should not be permitted other than in very special circumstances.

# **Question 15**

Do you think that the topics set out provide a comprehensive and appropriate basis for the development management policies?

Do you think there are any additional matters that should be considered in the determination of waste planning applications?

# Safeguarding existing waste management facilities

**10.37** Sites suitable for waste management facilities are scarce and can be difficult to find. For this reason, we need to ensure as far as possible that the operation of waste facilities is not adversely impacted by other developments. The updated national waste planning policy states that "In determining planning applications, all planning authorities should ensure that the likely impact of proposed, non-waste related development on existing waste management facilities, and on sites and areas allocated for waste management, is acceptable and does not prejudice the implementation of the waste hierarchy."

**10.38** To enable the Waste Planning Authority to ensure this, we will need to safeguard existing waste management facilities and sites allocated within the Waste Plan. Buffers around such sites will need to be determined so that the Waste Planning Authority is consulted by the district councils should an application for non-waste related development on or close to a waste site be received. This would give the Waste Planning Authority the opportunity to consider whether applications for other development would sterilise land allocated for a waste management facility, or would bring sensitive development (such as a residential development) into an area likely to be adversely affected by waste facilities potentially affecting their operation.

**10.39** The relationship between the proposed and existing land uses can then be considered before new permissions are granted. If the potential impacts are considered in advance as part of the design and development of the proposal, it will usually be possible to minimise

conflict between the existing waste management facility and the proposed development Should this not be possible, such applications would generally be opposed by the Waste Planning Authority.

# **Question 16**

Do you have any comments on how the Waste Plan should safeguard waste management facilities?

# Waste Plan Issues Paper

# 11 Vision and Objectives

# **11 Vision and Objectives**

# **Draft Vision**

**11.1** Based on our understanding of the current waste management industry we have developed a draft vision for sustainable waste management in Bournemouth, Dorset and Poole. We would welcome stakeholders' views on the vision, which will eventually present a concise picture of how we will manage our waste over the plan period.

#### A Vision for Waste Management in Dorset

By 2030, we will have worked with the community and delivery partners to achieve a sustainable waste management infrastructure that deals with existing and planned growth in Bournemouth, Dorset and Poole. This will maximise the economic benefits of sustainable resource management for the residents of Bournemouth, Dorset and Poole.

Our innovative and effective network of waste management facilities will have pushed waste management up the waste hierarchy and maximised the reuse of waste as a resource. Waste management facilities will be flexible, appropriately sized, located, designed and operated to minimise impacts on climate change, local amenity, and the natural and built environment whilst meeting the needs of communities and businesses.

# **Question 17**

Do you think the vision is clear and appropriate?

## **Draft Objectives**

**11.2** The Waste Plan should be based on a set of clear objectives for waste planning. The objectives will help to implement and deliver the spatial vision and will be translated into a spatial strategy, site specific allocations and core policies as the Waste Plan develops. A series of suggested objectives are set out below and we would welcome your views on these.

#### **Objective 1**

To promote and facilitate the movement of waste up the waste hierarchy, through minimisation of waste at source, increasing reuse, recycling, composting and recovery (including energy and heat) and with disposal to landfill being the last resort.

#### **Objective 2**

To promote and where possible facilitate the increased use of waste as a resource to maximise the economic benefits.

#### **Objective 3**

To provide for an adequate number and range of well designed, appropriately sized new and/or replacement facilities for the management of recyclables, organics, residual waste, inert materials and other wastes in the most appropriate locations, as close as practicable to the origin of waste, considering existing waste production, the implications of growth and new developments likely to generate waste.

### **Objective 4**

To provide a flexible approach for the delivery of waste management facilities and to allow for emerging technologies to come forward throughout the plan period and beyond.

#### **Objective 5**

To protect and enhance the County's natural resources, environmental, cultural and economic assets and tourism.

#### **Objective 6**

To protect and enhance the character and amenity of the local area and the health and wellbeing of the local people.

#### **Objective 7**

To assist in reducing greenhouse gas emissions and assist in adaption/mitigation and resilience to climate change.

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#### **Objective 8**

To facilitate a reduction in waste transportation and, where waste needs to be moved, to promote the sustainable movement of waste.

#### **Objective 9**

To work towards the aim of self sufficiency but recognising that for some types of waste it will not be practicable to have facilities in Dorset.

#### **Objective 10**

To safeguard existing waste management facilities from incompatible development.

# **Question 18**

Do you think the draft strategic objectives are appropriate and deliverable?

#### Sustainability Appraisal of the Vision and Objectives

An initial sustainability appraisal of the Waste Plan vision and objectives has been undertaken in order to test at this early stage whether they reflect the principles of sustainability that are established through the Sustainability Objectives (taken from the SA Scoping Report 2013). The full appraisal matrix is available on request.

In summary, the appraisal shows that there are a number of inevitable tensions between the vision and objectives, which may lead to the provision of new facilities, and the SA objectives, which aim to protect the natural and built environment and amenity. Many of the SA and Waste Plan objectives are directly compatible such as the movement of waste up the waste hierarchy, mitigation of the impacts of climate change, minimising impacts of transport and the promotion of sustainable transport modes. There would also be economic benefits from of the provision of a sustainable network of waste management facilities and through maximising waste as a resource.

Overall, the appraisal highlights the need for the Waste Plan to include all necessary safeguards through guidance and specific policies to ensure that any impacts from waste facilities are mitigated to acceptable levels.

# 12 Methodology for Site Selection

# **12 Methodology for Site Selection**

**12.1** A key role for the Dorset Waste Plan is to provide the spatial strategy and policy framework for locating future waste management facilities within Bournemouth, Dorset and Poole. Certainty and direction will be achieved through the allocation of sites within the plan.

**12.2** The purpose of this chapter is to enable stakeholders to comment on the proposed methodology that will be used for identifying specific sites for waste facilities and assessing them for their suitability. The methodology takes into consideration advice on identifying sites contained in the updated draft national waste planning policy and will be updated as necessary to take into account changes when the guidance is published in its final form.

## Sustainability Appraisal & Habitats Regulations Assessment

**12.3** Development plans must be subject to a sustainability appraisal to appraise the effects that the implementation of policies and proposals could have socially, economically and on the environment, measured against a series of sustainability objectives. <sup>(19)</sup>The appraisal methodology below will ensure that information is gathered to support potential sites covering the range of sustainability topics.

**12.4** A Habitat Regulations Assessment will examine the possible effects of the plan on European nature conservation sites and determine whether or not an Appropriate Assessment is required. This will be carried out as a separate process when draft policies and sites have been identified.

# Stage 1: Methods of Site Identification

Potential waste sites will be identified using the following four methods;

# 1. A 'call for sites' process

In October 2012, we wrote to the waste industry asking a series of questions which would draw out some of the issues that need to be addressed through the Waste Plan. We specifically asked whether the industry had possible new sites or extensions to existing facilities (both in terms of physical extensions/expansion of activities on sites) to put forward. These letters were followed up in most cases by meetings and site visits.

We have also written to the district/borough councils to seek their input on potential sites for waste management activities.

A number of opportunities have been suggested by the waste industry and the local authorities. These will be investigated further following stages 2 and 3 of this methodology.

Consultation on this Issues Paper will provide an opportunity to the waste industry and other stakeholders to suggest potential sites and respond to this consultation with details using the waste sites nomination proforma. The form can be downloaded from our website and is attached at Appendix 2. This form contains a list of the information required at this stage.

# 2. A review of site allocations within the current Waste Local Plan 2006

The Waste Local Plan 2006 contains a schedule of 10 sites allocated for specific waste management facilities. These sites have been reviewed to see which have been taken forward and which have not. The reasons why allocated sites have not been brought forward have been investigated to determine whether opportunities still exist within each site. A summary of this review can be found as Appendix 3.

# 3. A review of existing facilities

There is already a network of waste facilities in Bournemouth, Dorset and Poole. Through our work with the waste industry we have begun to investigate potential opportunities for expansion of existing facilities. This does not necessarily mean physical extensions', it could be that facilities have spare capacity and/or the activities that take place on site could be increased to move waste up the waste hierarchy. Co-locating waste management facilities together with complementary activities can be a sustainable practise. This review can be found as a background paper to this report, however it should be noted that this is a living document and will be regularly reviewed and updated.

#### 4. Sieve search for new sites

This method of site identification starts with identified broad locations for waste development and sieves out unsuitable locations based upon constraints. This work is yet to be completed but will be undertaken, following this consultation, when there is more certainly over the general locations where needs have been identified.

This work will consider a broad range of locations including;

- Employment sites, areas already used for, or allocated for, employment uses such as industrial estates, business and technology parks etc
- Previously developed land and redundant agricultural and forestry buildings and their curtilages. This could also include old quarries.

# Stage 2: Identifying the need

When assessing specific sites, the first consideration will be whether the site would fulfil an identified need.

Work has already been undertaken to determine needs and Chapters 5 - 8 address many of these. Needs identified in the three waste management strategies, further discussions with the three waste management authorities and discussions with the wider waste industry have given us a good idea of the issues surrounding the management of waste and potential needs.

Following this Issues Consultation, the Waste Planning Authority should have more certainty over the waste management needs of Bournemouth, Dorset and Poole. Responses to this consultation will be important to ensure that all needs have been identified, based on appropriate growth assumptions for all waste streams.

Further discussions will be held with the waste management authorities, the waste industry and other stakeholders, as necessary, in order to clarify needs and move on to the consideration of appropriate sites.

The Waste Plan would benefit from being 'technology-neutral'. This means that allocated sites would not specify a particular waste management technology. This is because technologies change - and will continue to change. The plan will concern itself with spatial and land use planning issues, not technology selection. It is quite possible to identify sites which are acceptable for a range of technologies, depending largely on the size of the site and its relative sensitivities.

# Stage 3 - Broad Considerations

The following sections contain the considerations that will be applied as sites come forward from all three methods of site identification explained above. The considerations below will be applied to the range of waste facilities.

# Deliverability

**12.5** Questions of deliverability are intended to refer to whether a site can physically be put into operation, before more specific impacts and considerations are looked at. They will include:

- Is the land owner interested in bringing forward the site for waste uses?
- Are there any alternative uses (to waste development) that have been identified, on the land, in other local plans?
- Are there issues of land ownership that could prevent development of the site within the plan period?

Guiding Principles - These principles underpin the plan and are key considerations. Sites and proposals that directly conflict with these aims are unlikely to be appropriate.		
Waste Hierarchy	If a specific waste management facility is being proposed, will that facility assist in moving waste up the waste hierarchy? If a site is being proposed with no specific waste facility in mind, will that site accommodate a facility that would assist in moving waste up the waste	
Proximity Principle	<ul> <li>hierarchy? This requires waste to be managed or disposed of as close as possible to its source in order to reduce waste movements. This principle will closely inform the site selection process. A description of the following issues will be made:</li> <li>Which towns and villages or general areas of waste arisings would a waste facility in this location be able to serve?</li> <li>What is sustainable, economic and practical?</li> <li>Would this proposal facilitate on-site management of waste?</li> </ul>	
Self Sufficiency	How will the site facilitate the move towards waste management self sufficiency?	
Co-locating waste facilities	What is the site's proximity to other waste facilities, would this proposal be considered to be co-locating waste management facilities together with complementary activities?	

## Guiding Principles - These principles underpin the plan and are key considerations. Sites and proposals that directly conflict with these aims are unlikely to be appropriate.

Although co-location is to be encouraged, consideration should be given to the cumulative effect of existing waste disposal facilities on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or the economy.

**12.6** Sustainable development is also a principle that guides the Waste Plan. An assessment of whether a site is considered to be sustainable development will be undertaken using the criteria set out in Tables 8 - 10

Social Issues		
Traffic and Access	Waste facilities can generate high numbers of vehicles including Heavy Goods Vehicles - although this will vary with the type and scale of the facility being promoted. Therefore an assessment needs to be made of the likely traffic generation, the sites access to the strategic highway network and the suitability of the road network in the wider areas. Specialist advice will be taken from transport development management engineers and the Highways Agency when undertaking this assessment.	
Impact on Sensitive Human Receptors	Sensitive human receptors are places where people may be affected by waste developments and include, but are not limited to, residential areas, dwellings, schools, places of worship, tourist attractions, recreational areas, hospitals, traveller sites, cemeteries and prisons. Acceptable distances from receptors will vary depending on the type of waste facility being promoted. As a guide major facilities located closer than 250m are likely to be unacceptable. However scale and improved environmental performance standards may enable facilities to be in closer proximity to housing.	
Public rights of way	The location of public rights of way such as footpaths or bridleways which cross or are likely to be affected by a waste proposal should be considered, together with the expected necessity to stop or divert these routes. If rights of way are likely to be affected advice will be sought from specialist officers.	

#### Table 9

Economic Considerations	
Maximising Resources	Whether the facility would secure economic benefits, through for example maximising reuse and recycling and using waste as a resource, will be considered.
Reduced waste management costs	On balance would the facility assist in reducing cost through, for example, the avoidance of landfill tax, reduced transport costs.
Viability	Would the site be appropriate to maximise viability in terms of of a its size and location.
Contribution to the local economy	Consideration will be given to how the facility will contribution to local economy This may include through the supply of energy, the number of jobs created, training and educational opportunities and non direct benefits.

Environmental Issues		
Protection of water resources	Consideration will need to be given to impacts of hydrology, groundwater, surface water and flooding. This aspect of the assessment will involve specialist input from the Environment Agency. Dorset County Council is required to carry out a Strategic Flood Risk Assessment of the County. As necessary, site specific flood risk assessments will also be produced and inform the assessment.	
Land Instability	As assessment should be made to assess whether a site is known to include features which can cause land instability. Features could include a historic landfill or an area of mineral working.	
Visual Intrusion	The plan area includes a valued diversity of landscapes with 53% of the county designated as two Areas of Outstanding Natural Beauty. When considering waste sites, specialist advice will be taken from landscape officers and other bodies such as the AONB team to consider landscape impacts on sensitive receptors. Although impact on designated landscapes will be a key consideration, the wider ability of the landscape to accommodate the development of a waste facility will also be important.	

Environmental Issues		
Nature Conservation	The plan area is rich in biodiversity, including internationally protected nature conservation sites, sites of special scientific interest, national nature reserves and sites and species of regional and local importance. When considering any waste site, specialist advice will be taken from County Ecologist and Natural England to ensure that potential impacts are highlighted and nature conservation interests are avoided and/or adequately protected. Sites which are judged to have possible linkages through which European sites could be effected will need to be subject to detailed assessment in the light of the Conservation Regulations.	
Historic Environment	The plan area contains a range of significant historic and cultural assets. When considering waste sites, specialist advice will be taken to assess impacts on Dorset's listed buildings, conservation areas, scheduled monuments and their settings.	
Airport Safety	The type of waste management facility and whether or not it will be enclosed within a building will be key considerations as this will determine whether birds are attracted to the area and so if bird strike could potentially be an issue. Specialist advice will be sought from the relevant airport authorities when considering sites within the 13km safeguarding consultation zone.	
Air emissions, including dust	Air quality should refer to potential impacts of waste sites on designated Air Quality Management Areas (AQMA). Consideration should be given to whether the site is situated within an AQMA and/or if traffic accessing the site would travel through an AQMA. The proximity to sensitive receptors and surrounding land uses and the extent to which adverse emissions can be controlled will also be considered.	
Odours Vermin and birds	The type of waste management facility and whether or not it will be enclosed within a building will be key considerations. The proximity to sensitive receptors and surrounding land uses and the extent to which impacts can be controlled will also be considered.	
Noise and Vibration	The type of waste management facility and whether or not it will be enclosed within a building will be key considerations.	

Environmental Issues		
Litter	The proximity to sensitive receptors and surrounding land uses and the extent to which impacts can be controlled will also be considered.	

# **Physical and Operational Requirements**

**12.7** Each potential development will be assessed to consider if it is practical and achievable in principle. Sites will be considered for a range of waste management activities. Some of the key considerations are as follows:

- Different waste facilities have different land take requirements. Distinguishing, where possible, between essential minimum site requirements and those that are desirable will be important. The key considerations and minimum land take requirements are set out in the tables that follow.
- If a specific facility is not being proposed, the guidance set out in the tables below should enable officers to consider which (if any) facilities might be achievable in principle on the land being promoted.

# **Question 19**

Do you agree with the requirements for different types of facilities set out in Table 11?

Type of Facility	Key physical and operational requirements	Environmental considerations arising from type of development
Household Recycling Centre	0.5 – 0.75 hectares minimum Scope for a split-level type building and to provide the extensive circulation and parking areas and storage space needed is essential.	Industrial-like use and operations. Can be either stand-alone or co-located with other waste management facilities and take into account that DWP includes depots/transfer stations and bin storage. Can generate high numbers of vehicles at peak times of year and weekends

Type of Facility	Key physical and operational requirements	Environmental considerations arising from type of development
		Close to populations that they will serve to meet identified need.
Waste Management Centre / Waste Transfer Station	At least 1 hectare in area Scope for a split-level type building and to provide the extensive circulation and parking areas and storage space needed is desirable.	Industrial-like use and operations – although can operate well in other locations where not too close to sensitive receptors Can generate high numbers of vehicles at peak times of year and weekends
Inert Recycling Facility	Flat area – as little as 0.25 hectares for a mobile screen Large area for stockpiles, powerscreen, mobile plant and any picking station(s) Circulation space for loading shovel Permanent plant enclosed within a building or covered bay Hard standing with positive drainage Storage for skips If combined with wider inert MRF operations, larger operations or sites close to receptors require a covered bay with height of 11 metres to allow for loading under cover using a back-hoe or similar	Distance from sensitive receptors Suitable locations can include derelict, despoiled or brownfield land and sites within/adjacent
Treatment Facilities – not technology specific (includes Anaerobic	Around 3 hectares (however smaller AD plants would require far less land) Scope for connection to the grid may be necessary &/or heat receptors.	Can be housed in industrial-type buildings, although scope for other architectural approaches according to the site and surroundings

Type of Facility	Key physical and operational requirements	Environmental considerations arising from type of development
Digestion, Energy from Waste, MBT and Incineration also includes bulk waste treatment)	Good access to the main road network (or ready scope to provide this)	Industrial-like nature of the buildings and their size/mass favours location on or near larger industrial/employment areas or areas with similar scale of structures Also need to consider requirements to deal with emissions (including need for high chimneys)
Composting: in-vessel or in-building	A sealed concrete area 100m x 50m (ideally larger) would be sufficient for a reception/dispatch area plus space for the vessel or building. For example, the 'Cambridge' system using forced air requires concrete pens 15m by 10m, with 3m high retractable roof	Issues can include effectiveness of controls over vermin and odours – and airborne emissions

# Waste Plan Issues Paper

# **13 Waste Site Nominations**

# **13 Waste Site Nominations**

## Waste Site Nominations

**13.1** In preparation for the next stage of the development of the Waste Plan, which will include the assessment of sites with potential for new or expanded waste management facilities, we are inviting site specific proposals to be put forward.

**13.2** We are looking for proposals that are consistent with the spatial vision, strategic objectives and provide additional waste management capacity where a need has been identified (see Chapters 5 - 8).

**13.3** The Waste Site Nomination Proforma, which can be found at Appendix 2, should be used to put forward a site for possible inclusion in the Bournemouth, Dorset and Poole Waste Plan. This form contains a list of the information required at this stage only - as the plan is developed and we get to the stage of assessing each site in detail we will write to all companies promoting sites individually with a detailed list of further information requirements. The information required will vary depending on the type of facility being promoted.

**13.4** The methodology for site selection, set out in Chapter 12, will be followed in order to assess sites put forward.

#### Checklist for nominating a site

- Have you downloaded the Waste Site Nomination Proforma from our website and completed it as fully as possible (including a site plan)?
- Have you considered whether your proposal would help to address one of the issues set out in this plan?
- We would recommend you also consider the methodology for site selection set out in Chapter 12 of this plan
# Appendix 1 - Glossary

## **Appendix 1 - Glossary**

**Air Quality Management Areas:** Areas designated by local authorities because they are not likely to achieve national air quality objectives by the relevant deadlines.

**Anaerobic digestion:** the natural breakdown of organic materials into methane and carbon dioxide gas and fertiliser. In the context of waste, this takes place in an anaerobic digester, which is typically a sealed vessel, or series of vessels, in which bacteria act without oxygen.

**Biodegradable municipal waste:** the fraction of municipal waste that will degrade within a landfill, giving rise to landfill gas emissions, primarily methane. It includes, amongst other materials, food waste, green waste, paper and cardboard.

**'Bring' site:** any facility (usually unstaffed and excluding household recycling centres) where members of the public can deposit recyclable materials such as glass cans, plastics, paper, textiles, shoes etc. Historically known as bottle banks.

**Bulky waste:** any article of waste which exceeds 25 kilograms in weight; and/or any article of waste which does not fit, or cannot be fitted into a receptacle for household waste or, where no such receptacle is provided, a cylindrical container 750 millimetres in diameter and 1 metre in length. Bulky waste is typically items that you would take with you when you move house, such as furniture, electrical appliances such as white goods, bicycles, rugs, garden furniture and other portable household items.

**Combined Heat and Power:** the combined production of heat (usually in the form of steam) and power (usually in the form of electricity). In waste-fired facilities, the heat would normally be used to serve a district eating scheme or to provide heating to an adjacent industrial use.

**Co-mingled recycling:** a system in which all dry recyclates such as paper, plastics, tins and other containers are mixed in a collection box and are put into one compartment on the lorry before being taken to a Materials Recycling Facility (MRF) and sorted. This is an alternative method to householders sorting their recyclables into different containers.

**Energy from Waste (energy recovery):** includes a number of established and emerging technologies through which energy is recovered from waste. Many wastes are combustible, with relatively high calorific values - this energy can be recovered through (for instance) incineration with electricity generation, gasification, pyrolysis or refuse derived fuel.

**Geological disposal:** A long-term management option involving the emplacement of radioactive waste in an engineered underground geological disposal facility, where the geology (rock structure) provides a barrier against the escape of radioactivity and there is no intention to retrieve the waste once the facility is closed.

**Incineration**: the controlled burning of waste at high temperatures in an industrial plant where combustible waste materials are burnt to reduce their volume, weight and pollution potential prior to disposal of the residual at landfill (although this is scope for re-use of the ash).

**Inert waste:** has no hazardous properties and does not undergo any significant physical chemical or biological transformations when disposed of. Examples of inert waste include concrete and sand. This waste category includes construction and demolition waste.

**In-Vessel Composting (IVC):** describes a group of methods that confine the composting materials within a building, container, or vessel. In-vessel composting systems can consist of metal or plastic tanks or concrete bunkers in which air flow and temperature can be controlled, using the principles of a "bioreactor". Generally the air circulation is metered in via buried tubes that allow fresh air to be injected under pressure, with the exhaust being extracted through a biofilter, with temperature and moisture conditions monitored using probes in the mass to allow maintenance of optimum aerobic decomposition conditions.

**Hazardous waste:** can be harmful to the environment and human health and therefore cannot be disposed of by conventional methods. Examples include paints, solvents, oil and pesticides. Where the production of hazardous waste cannot be prevented, opportunities for recycling and recovery should be fully investigated with disposal to designated landfill being the last option.

**Household Recycling Centre:** A site with facilities for recycling a range of household and garden waste, which can be deposited by residents living in the vicinity of the centre.

**Kerbside collection:** regular collection of recyclables from premises including collections from households as well as commercial or industrial premises.

**Landfill:** the controlled deposit of waste into or on to land in such a way that pollution or harm to the environment is minimised or prevented. Particularly used as the term to describe the deposit of waste in voids in the ground, generally created by previous mineral working (and where landfilling provides a means to restore the land affected by past mineral extraction). Landfilled organic wastes decompose anaerobically, producing methane, which is vented , but which, if its present om significant quantities, can be recovered for heat and power.

**Landfill Gas:** gas generated by the breakdown of biodegradable waste under anaerobic conditions within landfill sites. The gas consists primarily of methane and carbon dioxide, with trace concentrations of other gases.

**Materials Recycling Facility (MRF):** a facility where mixed recyclables are sorted and separated into different types of materials by hand or machine (or both) before being sent to manufacturers who make it into new products. The machinery, processes and the materials that each MRF can accept vary. Once materials have been sorted, recycled materials become valuable commodities in the worldwide market.

**Mechanical Biological Treatment (MBT):** Mechanical Biological Treatment is a waste treatment process that is used to treat residual waste. MBT involves both mechanical and biological methods. The 'mechanical' part refers to the processes used for preparing and separating waste. There are a number of waste preparation techniques, such as shredding, sieving, and screening which are used to reduce the size of the waste and separate it. Metals are also removed at by magnets and eddy current separators to maximise recycling. The 'biological' part of MBT refers to the composting of the organic elements of the waste.

**Minerals and Waste Development Scheme:** a document which sets out the documents that Dorset County Council intends to produce and the timetable for producing them.

**Non-hazardous waste:** waste that does not have any significant hazardous properties. However it is not inert and could cause problems if not dealt with properly due to the fact it may biodegrade. This waste category includes Household (Municipal Solid Waste (MSW)), Commercial and Industrial Waste. Examples of non-hazardous waste include paper, cardboard and plastic.

**Nuclear Decommissioning Authority (NDA):** A public body with responsibilities for the UK's public sector civil nuclear liabilities and their subsequent management, for developing and ensuring delivery and implementation of the programmes for interim storage and geological disposal of the UK's higher activity wastes, and for developing a UK wide strategy for managing the UK nuclear industry's Low Level Waste (LLW) and for securing disposal capacity for LLW from non-nuclear industry users.

**Open windrow composting:** used for processing garden waste, such as grass cuttings, pruning and leaves in either an open air environment or within large covered areas where the material can break down in the presence of oxygen.

**Refuse Derived Fuel (RDF):** A fuel produced by shredding municipal solid waste (MSW). Noncombustible materials such as glass and metals are generally removed prior to making RDF. The residual material is sold as-is or compressed into pellets, bricks, or logs and can be combusted to produce energy.

**Residual waste:** refers to waste left after all the materials that can be recycled and composted have been removed.

**Solid Recovered Fuel (SRF):** A solid fuel prepared from non-hazardous waste that is utilised for energy recovery in incineration or co-incineration plants and meets certain classification and specification requirements.

**Sustainability Appraisal:** local planning authorities are bound by legislation to appraise the degree to which their plans and policies contribute to the achievement of sustainable development. The process of sustainability appraisal examines the effects of plans and policies on a range of economic, environmental and social factors.

**Transfer Station:** a waste management centre to which waste is delivered for the separation or bulking up before being removed for recovery or disposal.

Waste: any substance or object which the holder discards or intends or is required to discard (20)

**Waste Collection Authority:** a local authority responsible for the collection of municipal waste. District authorities, or unitaries where applicable, usually are responsible for waste collection in England.

**Waste Disposal Authority:** a local authority responsible for the disposal of municipal waste. County councils and unitary authorities have this responsibility in England.

**Waste Management Centre**: a site that has both a household recycling centre and a waste transfer station on the site. Therefore, these centres have a facility for householders to deposit their waste and a facility for the bulking and sorting of delivered waste from municipal, commercial or industrial sources.

**Waste stream:** a categorisation of waste according to either the characteristics of the material or the source of the material.

# Waste Plan Issues Paper

# Appendix 2 - Waste Site Nomination Form

# **Appendix 2 - Waste Site Nomination Form**

## Bournemouth, Dorset and Poole Waste Plan

### Waste Site Nomination Form

## August 2013

Please use this form to put forward an extension to an existing waste facility or a new waste site for possible inclusion in the Bournemouth, Dorset and Poole Waste Plan. Please send completed form to the address at the end of this form.

Note: This is the information required at this stage only – as the plan is developed and we get to the stage of assessing each site in detail we will write to all companies promoting sites with a detailed list of further information requirements. This information required will vary depending on the type of facility being promoted.

Please continue onto a separate sheet of paper and/or include attachments as necessary to provide as much information as possible to promote your site.

### 1. Nominee Details

Contact Name		
Company		
Company Details	Address:	
	Tel:	E-mail:

## 2. Agent Details (if appropriate)

Contact Name		
Company		
Company Details	Address:	
	Tel:	E-mail:

## 3. Site Details

Site Name	
Address	
Postcode	

OS Map Ref (6 figures):	Total Area in Hectares:
<ul> <li>Site Plan – it is essential that a plan is provided identifying of</li> <li>Site boundary</li> <li>Proposed access arrangements</li> <li>Adjoining land uses</li> <li>Potential constraints</li> </ul>	clearly the site including:

# 4. Extensions/ expansion of sites already in operation

# A. LANDFILL FACILITIES ONLY:

Type of waste:			
EA Licence No:		Date issued:	
If not already provided, through DCC recent waste site monitoring exercise, please su the following			cise, please supply
Waste received (tpa)	2011:		2012:
Remaining voidspace (m <sup>3</sup> )			Date:
Permitted lifetime (include details of planning permission)			
Expected lifetime (if different to above)			
Current levels and types of traffic movement (daily):			
Description of proposed development to be promoted through the waste plan			

# B. NON-LANDFILL FACILITIES ONLY (inc. facilities at landfill sites):

Type of facility					
Type of waste(s) acco	epted				
Licence No:		<u>`</u>			Date issued:
If not already provided, through DCC recent waste site monitoring exercise, please supply the following					
Licensed capacity (tpa):		Operator's a	assessed cap	acity (tpa):	
Throughput	2011:			2012:	

Amount recycled, composted, or recovered	2011:	2012:	
Residue	2011:	2012:	
Catchment area			
Current levels and types of traffic movement (daily):			

## (For temporary facilities)

Expected lifetime:	Planning Reference(s):	
Description of proposed development to be promoted through the waste plan		

## 5. Potential New Development

#### Table 12

Description of development or facility:			
Type of waste to be handled			
Potential catchment area			
Expected lifetime (if temporary facility)			
Expected capacity (tpa)			
Amount to be recycled, composted, or recovered (tpa) (if relevant)			
Potential levels and types of new traffic movements (daily):			
<ul> <li>Site Plan – it is essential that a plan is provided identifying clearly the site including:</li> <li>Site boundary</li> <li>Proposed access arrangements</li> </ul>			

- Adjoining land uses
- Potential constraints

## 6. Any Other Relevant Information

E.g. Restoration & after use (for landfill sites); proposals for mitigation of any environmental impacts; reference to any detailed plans submitted etc.

## 7. Ownership Details

Are you/your company the site land owner?		Yes	No	
If no, please explain who owns the site and what your interest is?				
Please give contact details of the land owner:				
Contact Name				
Contact Details	Address:			
	Tel:	E-mail:		

### Declaration

I accept that any information provided in support of a site nomination will need to be made publicly available in due course.

I also understand that this invitation to nominate a site for possible inclusion in the Waste Plan is without prejudice to the decisions taken by the County Council on the strategies and site allocations to be included in the Plan.

Signed(or submitted electronically)	print	if
On behalf of (if applicable)		
Date		
Completed nominations must be returned to the following address:		
Minerals and Waste Planning Policy		
Environmental Services		
Dorset County Council		
County Hall		
Colliton Park		
Dorchester		
DT11XJ		
Tel: 01305 228585		
Email: mwdf@dorsetcc.gov.uk		
Website: <u>www.dorsetforyou.com/mwdf</u>		

# Waste Plan Issues Paper

# Appendix 3 - Review of Sites Allocated in the Waste Local Plan (2006)

# Appendix 3 - Review of Sites Allocated in the Waste Local Plan (2006)

1 The following sites are currently allocated in the Bournemouth, Dorset and Poole Waste Local Plan (2006). An initial review of these sites has been undertaken.

- 2 Table 13 summarises the results of this review highlighting:
- Sites that have been developed for the proposed uses
- Where, since adoption of the Waste Local Plan, allocated sites are no longer appropriate for the development proposed.

#### Table 13 Initial Review of Waste Local Plan Allocated Sites

Site	Facilities Specified	Review
1. Warmwell Quarry & Landfill	Aggregates recycling Inert landfill	Temporary permission granted in March 2011 for inert landfill. Further review required through the development of the Waste Plan, however opportunities are likely to be limited as the site is being restored.
2. Victoria Ave, Swanage	Household Recycling Centre	Site permitted and delivered. No need to review/take forward.
3. Winfrith	Mechanical Biological Treatment with Refused Derived Fuel	Further review required into potential opportunities through the development of the Waste Plan, if there is a need for a waste facility in this area.
4. Land at Bournemouth Airport	Mechanical Biological Treatment with Refused Derived Fuel	Site unlikely to be deliverable. Landowner has indicated it does not wish to see site allocated in the Waste Plan.
5. Henbury Pit	Inert landfill Material recovery/recycling for inert/CDE	Further review required into potential opportunities through the development of the Waste Plan.
6. Hatchpond Depot, Nuffield	Thermal treatment with energy recovery	Waste facilities proposed unlikely to be developed on this site.

Site	Facilities Specified	Review
	Materials Recycling Facility Municipal waste transfer	The site is currently being fully utilised by the Borough of Poole for a range of highways/waste collection uses including vehicle depot and maintenance, storage.
7. Nuffield HRC	Materials Recycling Facility Municipal waste transfer	Site permitted and developed for a Waste Management Centre. No need to review/take forward.
8. Millhams Lane HRC	Materials recycling/recovery – poss transfer	Unlikely to be scope for a wider range of uses than currently exists.
9. Binnegar Quarry	Aggregates recycling Materials Recycling Facility Composting (open windrow) In-vessel composting	Permission granted for Binnegar Environmental Park and Materials Recycling Facility. Further review required into potential opportunities through the development of the Waste Plan if there is a need for a waste facility in this area.
10. Site Control Centre Canford Magna	Expansion of existing site Existing permission for enclosed composting Aggregates recycling	Since the adoption of the Waste Local Plan, there have been various permissions and developments on this site. Further review required into potential opportunities through the development of the Waste Plan.

# Waste Plan Issues Paper

Minerals and Waste Planning Policy Team Environment Dorset County Council County Hall, Colliton Park Dorchester, Dorset DT1 1XJ

Tel: 01305 228585 Email: mwdf@dorsetcc.gov.uk www.dorsetforyou.com/waste-plan

All documents can be made available in audio tape, large print and Braille, or alternative languages on request.