Bournemouth Borough Council

BOROUGH OF POOLE

DORSET County Council

Bournemouth, Dorset and Poole Waste Local Plan

Adopted 30 June 2006

Bournemouth Borough Council
Dorset County Council
Borough of Poole

Bournemouth, Dorset and Poole Waste Local Plan

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Adopted 30 June 2006

Foreword

In recent years there has been increasing awareness nationally and locally of the problems posed by the amounts of waste our society produces. Even in areas like ours, where recycling levels are amongst the highest in Britain, the volumes of waste being produced continue to grow year on year. European and national policies recognise that there must be a fundamental transformation in how we manage waste, to reduce it, recover value and to move firmly away from landfill. Failure to address this will adversely affect our economy as well as our environment, and we cannot leave these problems for future generations to resolve.

All three local authorities have published waste management strategies which establish how we can better manage our wastes. The physical infrastructure needed to make these changes happen is radically different, and has different locational requirements. This Waste Local Plan provides guidance on where the new facilities should be provided.

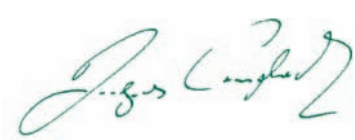
The Plan has been prepared with full opportunities for public engagement involving community groups, environmental bodies, the waste management industry, landowners and other interested parties. Objections to the Plan were heard before an independent Planning Inspector during 2005, and the findings were published in May 2006. These findings are binding on the three Councils and have been incorporated in this document prior to its adoption by each of the Authorities.

Waste policy continues to develop at a national level, and it will be necessary to keep this Plan under review and bring forward new proposals. The Inspector recommended that three sites be deleted from this Plan, at Dorchester, Bridport and Ferndown. He recognised that the facilities were necessary but considered that further work should be undertaken, and these sites do not therefore appear in this Plan.

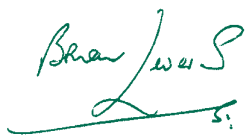
Planning Policy Statement 10 (PPS10) was published after the Inquiry sessions had closed, and replaces Planning Policy Guidance 10 (PPG10) as up to date advice to Waste Planning Authorities. Some of the terminology in this Plan reflects the basis of older advice on which the Plan was founded, and some terms are no longer current policy. The Inspector did however take PPS10 into account and considered objections having regard to that new national policy. Whilst some terms, such as Best Practicable Environmental Option and Proximity Principle remain in this Plan, he considered that such differences should be addressed in reviews of the Plan. A similar response will be required in relation to changes to Waste Strategy 2000, the National Waste Strategy, which is currently under review.
The Inspector further concluded that 'Appropriate Assessment' of sites affected by nature conservation issues would be dealt with in detail at planning application stage, and text changes have been made reflecting his view that sufficient assessment has been undertaken at this development plan stage.

We are pleased to commend this Plan, which will play an important role in enabling the major shift away from reliance on landfill to more sustainable waste management methods.

Richard Smith,
Leader of the Council,
Bournemouth Borough Council



Angus Campbell,
Leader of the County Council,
Dorset County Council



Brian Leverett,
Leader of the Council,
Borough of Poole

Bournemouth, Dorset and Poole Waste Local Plan

Chapter 1
Introduction

Setting the Scene

1.1 "It is widely recognised that the way in which we, as a society, manage the waste we produce, needs to change if we are to ensure that our environment is better protected now and for future generations" (*PPG 10 Planning and Waste Management*). Sustainable solutions to waste management and planning must be found. This Waste Local Plan seeks to make provision for the facilities needed now and in the future to deal with the millions of tonnes of waste that will be produced, whilst safeguarding the environmental quality of Bournemouth, Dorset and Poole.

The Statutory Framework

1.2 The Town and Country Planning Act 1990 (as amended) requires Waste Planning Authorities to prepare a Waste Local Plan setting out the framework to enable the waste management industry to establish appropriate waste management facilities, in a way which meets the objectives of sustainable development. This Plan is prepared in accordance with this Act and the Town and Country Planning (Development Plan) (England) Regulations 1999 and with guidance published in the form of Planning Policy Guidance Notes (PPGs) and Planning Policy Statements (PPSs). The First Deposit Draft (September 2003) was the first step in reviewing and replacing the policy framework for waste provided in the adopted Minerals and Waste Local Plan (April 1999). The next stage involved the preparation and consultation on a "Re-deposit" Plan (September 2004). This procedure was in accordance with the transitional arrangements introduced by the Planning and Compulsory Purchase Act 2004 and associated regulations.

1.3 Section 38 (6) of the 2004 Act maintains the well-established principle of a plan-led planning system. The statutory development plan (of which this Plan forms part) will continue to be the starting point in consideration of planning applications for the development or use of land. This Plan takes account of guidance in Planning Policy Guidance Note 12 (Development Plans). More recent guidance in Planning Policy Statement 12: Local Development Frameworks, applies to the plans system introduced by the 2004 Act. Further information on the development plan process is available in the Government booklet *Local Plans and Unitary Development Plans: A Guide to Procedures* which is available free of charge via Dorset County Council. Any revised or replacement booklet explaining the new planning process will be made available once published.

Plan Area and Life

1.4 The Plan is being jointly prepared by Bournemouth Borough Council, Dorset County Council and the Borough of Poole in their remit as Waste Planning Authorities and therefore the Plan covers the three administrative areas. The Waste Local Plan provides a comprehensive framework for waste planning in these areas up until 2016. In line with current Government guidance the Plan will be closely monitored and reviewed immediately after adoption to reflect the requirements of the Planning and Compulsory Purchase Act 2004. Once adopted, the Plan will be saved for a three year

period under the transitional arrangements of the 2004 Act, during which time it will be replaced by new Waste Development Documents as referred to in the Minerals and Waste Development Scheme.

Sustainable Waste Management and Plan Appraisal

1.5 The Government is committed to the principle of sustainable development. This principle guides us to consider how present needs can be met without compromising the ability of future generations to meet their needs. The Government's strategy is enshrined in *"A better quality of life, a strategy for sustainable development in the UK"*. This strategy is based on the following four objectives:

- Maintenance of high and stable levels of economic growth and employment;
- Social progress which recognises the needs of everyone;
- Effective protection of the environment; and,
- The prudent use of natural resources.

1.6 It is the Government's belief that the planning system and development plans in particular have the ability to make a major contribution to fostering sustainable development in this country. In fact PPG 12 (Development Plans) sets out objectives to be followed to ensure that Waste Local Plans achieve sustainable waste management. This is covered in Chapter 3. Subsequently PPS12 (Local Development Frameworks) has provided guidance on the preparation of Minerals and Waste Development Frameworks. PPS12 will be taken into account in the future revision of this Plan.

1.7 In line with Government wishes at the time the Waste Local Plan was prepared, it has been the subject of a Sustainability Appraisal. This was carried out by an independent specialist to provide a rigorous and impartial assessment. The appraisal forms an integral part of the Plan and informs the development of policy. The second round of appraisal included the proposed changes to the First Deposit Plan and was completed in August 2004.

Timetable for Adoption of the Plan

1.8 The Waste Local Plan was subject to a statutory preparation and adoption process with stages of publication and consultation. The Planning and Compulsory Purchase Act, passed in May 2004, changed the procedure by replacing the system of Local Plans with Local Development Frameworks. This Waste Local Plan was progressed under transitional arrangements. These required the First Deposit Plan to be placed on Re-deposit along with the proposed changes, and for the Inspector's findings following the Local Plan Inquiry to be binding on the three Waste Planning Authorities.

1.9 Set out below is the timetable for production of the Plan, which also illustrates the effects of the procedural changes.

Timetable for the Waste Local Plan Production

Estimated Date	Stages in the Review Process
February 2001	**Publication of the Review Brief** Established the need to review the existing policies and proposals for waste. The brief also sets out the initial programme and timetable for review.
March 2001	**Pre-Deposit Consultation on Issues** This sought views on the broad strategy and direction of the Plan and helped identify the changes required to the existing policies and proposals.
September 2003	**Publication of First Deposit Plan** A full version of the reviewed Plan was published. Representations considered and amendments made to the Plan.
Autumn 2004	**Re-deposit the First Deposit Plan** The First Deposit Plan and amendments were available for comment.
May – Sept 2005	**Public Local Plan Inquiry** An independent Inspector considered objections to both the First Deposit Plan and Re-deposit Plan.
June 2006	**Adoption** Of the Waste Local Plan following receipt of the Inspector's Binding Report.

Chapter 2
The context of the plan

2.1 The Waste Local Plan has been prepared in the context of a wider framework of international, national and regional policy and legislation on land use planning and waste management. The strategic context on waste issues is set out below.

Who does what?

2.2 There are various organisations which have particular responsibility for the planning, management and regulation of waste. These are set out below:

Role	Organisation	Main Responsibilities
Waste Planning Authority (WPA)	Bournemouth Borough Council Dorset County Council Borough of Poole	● Production of a Waste Local Plan, Minerals and Waste Local Plan or Waste Development Documents ● Determination of planning applications for waste. ● Monitoring and enforcement of planning control.
Waste Disposal Authority (WDA)	Bournemouth Borough Council Dorset County Council Borough of Poole	● Arrangement via waste contracts for disposal of waste collected by and on behalf of the Waste Collection Authorities. ● Arrangements for the provision and operation (under contract) of suitable sites where members of the public can take their own waste. ● Production of a Waste Strategy setting out how waste will be managed.
Waste Collection Authority (WCA)	Bournemouth Borough Council Borough of Poole North Dorset District Council East Dorset District Council West Dorset District Council Purbeck District Council Weymouth & Portland Borough Council Christchurch Borough Council	● Collection of waste from households and some commercial premises. ● Powers to recycle waste and preparation of recycling plans. ● Street cleaning and litter control. ● Delivery of waste not recycled to sites specified by the WDAs.
Waste Regulation Authority (WRA)	Environment Agency	● Advising Government on the National Waste Strategy. ● Controlling the pollution aspects of new waste facilities through waste licensing. ● Providing information to WPAs on waste arisings. ● Site monitoring and enforcement of licenses.

The Department for Environment Food and Rural Affairs (Defra) is responsible for administering the Animal By-Products Regulations

Which types of waste does the Plan make provision for?

2.3 The Plan provides a policy framework for wastes classed as 'controlled' as set out below.

Category	Definition
Household Waste	All waste collected by the Waste Collection Authorities plus waste arising from Household Recycling Centres (Civic Amenity Sites), including waste collection rounds, street cleansing, bulky waste collections, garden waste collections, drop-off / bring systems and other waste collected on behalf of the authority.
Municipal Waste	Consists of household waste together with any other waste collected by the Waste Collection Authority such as waste from municipal parks and gardens, beach cleaning waste, industrial and commercial waste and waste resulting from the clearance of fly-tipped materials.
Industrial and	Waste from any factory or industrial process (excluding mines or quarries) includes materials such as paper, card, plastics, wood, metal, tyres and canteen waste.
Commercial Waste	Waste arising from premises used wholly or mainly for trade, business, sport, recreation or entertainment, excluding household and industrial waste.
Construction and Demolition Waste	Waste materials which arise from the construction or demolition of buildings and/or civil engineering infrastructure, including hard C&D waste and excavation waste, whether segregated or not. Hard C&D waste means either segregated or mixed unprocessed/ uncrushed materials (particularly concrete, masonry, bricks, tiles, 'blacktop', etc.). Excavation waste means naturally occurring soil, stone, rock and similar materials (whether clean or contaminated) which have been excavated as a result of site preparation activities.
Sewage & Waste Water	Sludge from raw sewage treatment processes and waste from septic tanks and cesspools.
Clinical waste	Waste which is wholly or party made up of animal or human tissue, drug and pharmaceutical products which is infectious or could cause other harm and which arises from medical, nursing, dental and veterinary establishments.
Special Waste	Those wastes as defined by the Environmental Protection (Special Waste) Regulations 1996 – broadly any waste in the above categories which displays one of 12 hazards above threshold limits set out in the regulations, or one of the 14 hazards above threshold limits set out in the European Hazardous Waste List. Special wastes include tars, acids, organic solvents, paints and heavy metals.
Agricultural Waste	General waste produced by farming and horticultural activities, such as slurry, scrap metals and timber. The overwhelming majority is composed of animal excrement which is returned to the land.

International Policy Context

2.4 European law on waste is set out in a number of directives, regulations and judgements from the European Court. The Waste Framework Directive provides the key requirements for Member States. In particular, the need to plan for waste management so as to meet the targets for waste reduction and recycling. Also self sufficiency in handling of Waste and the requirement to regulate waste management activities so as to prevent harm to human health and the environment.

Recent additional European policy measures to improve sustainable waste management are set out below:

Hazardous Waste Directive

2.5 The Hazardous Waste Directive provides a definition of wastes that by their nature present significant risks to human health and the environment. The Directive is linked to the European Waste Catalogue, a list of waste from different sources some of which are defined on the list as hazardous. Full implementation of the Directive and Waste Catalogue in the UK in 2005 increased the amount of waste defined as hazardous by including such items as cathode ray tubes and fluorescent lighting for the first time.

Local Authority Trading Scheme

2.6 The Local Authority Trading Scheme for landfill allowance of biodegradable waste was introduced in the Waste and Emission Trading Act 2003 and associated Landfill Allowances and Trading Scheme (LATS) Regulations 2003. The scheme sets statutory maximum permissible allowances on the disposal of biodegradable municipal wastes for each waste disposal authority in England. The decreasing size of allowances will meet the requirements of Article 5 of the Landfill Directive that requires the progressive diversion of biodegradable municipal waste from landfill by 2020.

2.7 The Regulations enable the trading of landfill allowances between local authorities so as to meet the targets in the most economical fashion for the country as a whole. Higher levels of diversion in one authority through incineration for example may be off set by increased landfill in another so that the country meets its statutory obligations under the directive.

The Landfill Directive

2.8 Council Directive 99/31/EC on the Landfill of Waste (the Landfill Directive) is a significant policy instrument and a key driver for change. Landfill is a major source of methane and other 'greenhouse gases' which are produced when biodegradable materials decompose. Landfilling can also be seen as a wasted opportunity in resource recovery terms. The Landfill Directive seeks to change this situation by setting ambitious targets to reduce biodegradable waste going to landfill, which are as follows:

- By 2010 to reduce biodegradable municipal waste landfilled to 75% of 1995 levels;
- By 2013 a further reduction to 50% of 1995 levels; and
- By 2020 a further reduction to 35% of 1995 levels.

2.9 The other main requirements of the Landfill Directive include:

- Banning of co-disposal of hazardous and non-hazardous waste and requiring separate landfills for hazardous, non-hazardous and inert waste;
- Banning the landfill of tyres;
- Banning landfill of liquid waste, infectious clinical waste and certain hazardous waste.

2.10 The Landfill Directive necessitates significant changes to the way in which waste is managed. The principal mechanisms for achieving these requirements (in England and Wales) are set out in Waste Strategy 2000 (See National Policy Context).

Directive on the Incineration of Waste

2.11 In November 1999 the European Council reached a common position regarding the proposed Directive on the Incineration of Waste, the provisions of which were implemented by Waste Incineration (England and Wales) Regulations in December 2002. The aim of the Directive "is to prevent or where that is not practicable to reduce as far as possible negative effects on the environment caused by the incineration and co-incineration of waste". It aims to reduce pollution caused by emissions into the air, soil, surface water and groundwater, and thus lessen the risks which these pose to human health. It should be noted that the directive does not require waste to be incinerated.

End of Life Vehicles (ELV) Directive (2000/53/EC)

2.12 It is estimated that each year over 2 million vehicles reach the end of their lives in the UK. This is either due to their age or because they are heavily damaged in an accident. Currently about 75% of the weight of each ELV is recycled (Environment Agency). The End of Life Vehicles Directive passed into European Law in October 2000 aiming to reduce the amount of waste to landfill from ELVs by setting rising re-use, recycling and recovery targets for 2006 and 2015. In particular it:

- Restricts the use of certain heavy metals in new vehicle manufacture from 1 July 2003;
- Introduces a "certificate of destruction" for vehicles that are scrapped;
- Requires producers to mark certain vehicles components to assist recycling;
- Requires that ELVs can only be scrapped at Authorised Treatment Facilities (ATFs);
- Vehicles that were put on the market from 1 July 2002, with a negative value when scrapped, should be taken back by producers at no cost.

In November 2003 the End of Life Vehicles Regulations 2003 came into effect.

Further information on vehicle dismantling is set out in Chapter 6.

Waste Electrical and Electronic Equipment (WEEE) Directive (2002/96/EC)

2.13 The amount of Waste Electrical and Electronic Equipment (WEEE) generated in the community is rapidly growing and the content of hazardous components in electrical and electronic equipment is a major concern. The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment and improve the environmental performance of those involved in its production, distribution and consumption. In particular those operators directly involved in the treatment of waste electrical and electronic equipment. Challenging targets will be set to increase the recycling and recovery of different categories of appliance.

National Policy Context

Waste Strategy 2000

2.14 Waste Strategy 2000 (WS2000) sets out the Government's vision for waste management for the future and the actions that will be needed to deliver it. The visions are formed around the principles of sustainable development (as defined in Chapter 1). WS2000 sets out targets for the management of waste, which the Government believe, if met, should ensure that England and Wales comply with the Landfill Directive:

- Recover value from 40% of municipal waste by 2005, 45% by 2010 and 67% by 2015;
- To recycle or compost at least 25% of household waste by 2005, 30% by 2010 and 33% by 2015;
- By 2005 reduce the amount of industrial and commercial waste landfilled to 85% of 1998 levels.

2.15 A Consultation Document on the Review of England's Waste Strategy was published in February 2006. It is intended that the revised Waste Strategy will be published by the end of 2006. This timing will enable the strategy to be taken into account in the revision of this Waste Local Plan.

2.16 To ensure that the targets for municipal waste are met, the Government has set performance standards for local authority recycling through the Best Value regime. Government will introduce landfill permit trading early in the plan period which limits the amount of waste that could be landfilled by a Waste Disposal Authority.

Planning Policy Guidance Note 10: Planning and Waste Management (PPG 10)

2.17 PPG 10, the national planning framework for waste sets out the important role of land-use planning in achieving sustainable waste management and establishes a series of sustainability objectives. The Government states that it would also wish to see future waste management decisions based on 4 key principles: the Best Practicable Environmental Option, a hierarchy of waste management options, self sufficiency and the proximity principle. These 4 principles are key to the development of the Waste Local Plan and their role and application is discussed in Chapter 3.

2.18 PPG 10 provides guidance on the content of Waste Local Plans and establishes that *'Plans should identify existing waste management sites with capacity for the future and, where practicable, new or extended sites sufficient to make adequate future provision of waste management facilities'*. It sets out that identification of specific sites for development is the best way that the planning system can make provision for future waste management facilities and if this is not possible, WLPs should justify why this approach has not been followed.

2.19 In July 2005 Planning Policy Statement 10: Planning for Sustainable Waste Management, was published, replacing PPG10. Some of the terms used in PPG10 are not found in PPS10, nor are they now in Waste Strategy 2000, which was amended concurrently to accord with PPS10. The terms no longer found include some that have been used extensively in the Plan and have contributed to its guiding principles (see Chapter 3), such as Best Practicable Environmental Option and Proximity Principle. It will therefore be necessary for these differences to be addressed along with other new policy and guidance in the review of this Plan. Under the transitional arrangements (see paragraph 1.4) the Plan will be saved for three years, during which time it will be replaced by Waste Development Documents.

2.20 The Inspector, introducing his report on objections to the Plan, states in relation to PPS10 that:

"More importantly, however, I had regard to the key planning objectives of PPS10 aimed at delivering sustainable waste management by providing sufficient opportunities for new waste management facilities of the right type in the right place. They include driving waste management up the waste hierarchy, meeting relevant targets and obligations, securing recovery or disposal of waste without endangering human health and without harming the environment and enabling waste to be disposed of in one of the nearest appropriate installations. These objectives are encompassed in the Plan, albeit in the context of terms that no longer form part of national policy."

2.21 PPG 10 proposed the setting up of Regional Technical Advisory Bodies (RTABs) to advise the regional planning bodies (as covered below).

Regional Planning Policy Context

2.22 Regional guidance is contained in South West Regional Planning Guidance Note 10 (RPG 10) which was published in September 2001. Regional Planning Guidance is produced by the Regional Assembly in consultation with the Government Office for the South West. RPG 10 provides a framework for the plans and strategic decisions of public, private and voluntary organisations in relation to land use, transport, economic development and the environment over the period to 2016. The policy on the 'Management and Transportation of Waste' establishes that a mix of recovery methods should be developed, it sets regional targets for recovery and disposal (in line with national targets), it gives priority to the provision of waste management facilities that will recover waste at or near the principle urban areas and guides that Structure and Waste Local Plans should take sub-regional requirements into account.

2.23 The draft Regional Spatial Strategy for the South West will be the subject of formal consultation during summer 2006. It includes policies that reflect the Regional Waste Strategy (see below).

Regional Technical Advisory Body on Waste and the Regional Waste Management Strategy

2.24 Regional Technical Advisory Bodies (RTABs) were formally established by the publication of PPG 10 on Planning and Waste Management. The RTABs terms of reference include provision of technical advice to the Regional Assembly via officer and member groups. To date the work of the RTAB has concentrated on building a database of waste management arisings and practice in the Southwest.

2.25 The Regional Waste Strategy for the South West 2004-2020 was published in 2004. It includes waste management targets and indicates how regional and sub-regional needs could be met.

Strategic Planning Policy Context

2.26 The Bournemouth, Dorset and Poole Structure Plan was adopted in July 2000. The Structure Plan looks towards the year 2011 and provides the strategic framework for waste related development. The policies contained in the Structure Plan were taken into account when developing the Waste Local Plan. The adopted Structure Plan advises that provision should be made for facilities for re-use, recovery, recycling, energy generation or composting and where these methods are not appropriate, facilities for the processing and disposal of residuals. The Structure Plan also sets out policy on environmental and amenity issues. A review of the adopted Plan commenced during 2001 and the Replacement Structure Plan was placed on deposit in July 2004, but will not be progressed beyond the deposit stage.

Local Planning Policy Context

2.27 The 6 Districts/Borough Councils and Poole and Bournemouth Unitary Authorities provide the local policy context through the preparation and adoption of district-wide Local Plans and Local Development Frameworks. The Dorset Minerals and Waste Local Plan remains the adopted local policy context for minerals, whilst this adopted Waste Local Plan provides the policy context for waste.

Local Waste Management Strategies

2.28 Local Waste Management Strategies have been adopted by each of the 3 Waste Disposal Authorities (Bournemouth, Dorset and Poole). These strategies address how municipal waste is to be dealt with within each area and the methods to be employed in the collection, handling, treatment and final disposal of waste. They provide a framework against which contracts for recovery and disposal will be determined. The role of the Waste Local Plan is to consider the requirement for facilities (as identified in the strategies) and their land-use implications. In addition, where the Strategies identify particular technologies, the Plan can identify where the need for these additional facilities can be accommodated.

Chapter 3
Guiding Principles & Core Policies

3.1 The principle of sustainability is an important planning consideration. Government policy sets out that *"Sustainable development is the core principle underpinning planning. At the heart of sustainable development is the simple idea of ensuring a better quality of life for everyone, now and for future generations. A widely used definition was drawn up by the World Commission on Environment and Development in 1987: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs"."* (Planning Policy Statement 1 Delivering Sustainable Development, paragraph 3). Paragraph 8 of PPS1 goes on to state: *"This plan-led system, and the certainty and predictability it aims to provide, is central to planning and plays the key role in integrating sustainability objectives. Where the development plan contains relevant policies, applications for planning permission should be determined in line with the plan, unless material considerations indicate otherwise."* The policies and proposals of the Bournemouth, Dorset and Poole Waste Local Plan have been formed on the following key objectives which are aimed at promoting sustainable waste management:

A – To develop a balance between the need for waste management facilities and the need to protect the environment which maximises the sustainability of both;

B – To encourage re-use, recycling and recovery of waste materials within a hierarchy of waste management options and to take account of the potential for waste minimisation;

C – To identify areas where the requirement for waste management facilities can take place without prejudicing the best of the local environment or the amenities or living conditions of its residents and visitors now and in the future;

D – To seek to minimise adverse environmental impacts resulting from the handling, processing, transport and disposal of waste;

E – To ensure that, where appropriate, land taken for waste management facilities is restored at the earliest opportunity, and, for waste disposal, progressively, to an agreed after-use and standard which does not detract from the quality of the local environment;

F – To ensure, where appropriate and practicable, a positive contribution in terms of landscape enhancement, habitat creation, public access or recreational uses on restored waste sites;

G – To seek the co-operation of the waste industry in upgrading the built development, operations and restoration of existing permitted sites to the best current standards;

H – To prevent the unnecessary sterilisation of valuable waste management resources by other forms of development;

I – To develop an integrated network of facilities for all waste streams which meets the needs of business and encourages competitiveness;

J – To ensure that opportunities for incorporating re-use and recycling facilities in new developments are properly considered;

The achievement of these objectives was checked through the Sustainability Appraisal of the Plan, through monitoring the effectiveness of the policies and the compliance of operators with conditions on planning permissions. Details of the monitoring programme are set out in Chapter 9 and also in the Annual Monitoring Report produced by the 3 Waste Planning Authorities.

The Guiding Principles for the Waste Local Plan

3.2 The Waste Local Plan sets out to achieve the key objectives by identifying sites and by providing criteria against which planning applications for waste management facilities can be determined. In addition to the key objectives, the planning strategy is guided by four principles which are recognised by the Government in PPG 10 to be the mechanism of achieving sustainable waste management. These principles are:

- The Best Practicable Environmental Option (BPEO)
- Self-sufficiency
- The Proximity Principle
- The Waste Hierarchy

3.3 As explained in paragraphs 2.19 - 2.20 PPG10 has been replaced by PPS10, which no longer includes some of the above terms. This change will be addressed in the review of the Plan.

3.4 The interpretation of the principles in PPG10 is set out below.

The Best Practicable Environmental Option

3.5 The BPEO is a process that should be used for considering the relative merits of various waste management options in a particular situation. It has been defined by the Royal Commission on Environmental Pollution as "the outcome of a systematic consultative and decision making procedure which emphasises the protection and conservation of the environment across land, air and water. The BPEO procedure establishes, for a given set of objectives, the option that provides the most benefits or the least damage to the environment, as a whole and at an acceptable cost, in the long term as well as in the short term".

3.6 The Government's Waste Strategy 2000 sets out that when considering the BPEO, decision makers need to have regard to obligations set out in waste policy at the international and national level, and also regional and local policy. Importantly for the Waste Local Plan, to apply the concept of the BPEO in a planning context local **environmental, social and economic** factors will be important considerations. Waste Strategy 2000 establishes that "these may well result in different BPEOs for the same waste in different areas, or even different BPEOs for the same type of waste in the same area but at different times". In other words, there will be no uniform result. In determining BPEO the Government expect account to be taken of regional self-sufficiency, proximity principle and of the waste hierarchy.

Regional Self Sufficiency

3.7 The Government's view is that most waste should be treated or disposed of within the region in which it is produced. Each region should provide for facilities with sufficient capacity to manage the quantity of waste expected to arise in that area for at least 10 years. Waste Planning Authorities should make adequate provision in their Plans for any waste management facility that may be needed, taking account of the advice of the Regional Planning Body. This advice comes from Regional Planning Guidance (RPG) (as set out in the previous chapter). For the South West the RPG policy on the 'Management and Transportation of Waste' establishes that a mix of recovery methods should be developed, it sets regional targets for recovery and disposal (in line with national targets), and says that priority should be given to the provision of waste management facilities that will recover waste at or near the principal urban areas.

Proximity Principle

3.8 The principle requires waste to be disposed of as close as possible to its place of production. This is to ensure that problems are not exported to other regions and to communities which are not responsible for its generation, and also to recognise the environmental impact and cost of transporting waste. The proximity principle can make the link between the waste hierarchy and the BPEO as there may be less environmental impact and cost to dispose or recover energy from waste than to send it to a distant recycling reprocessing plant or market. The proximity principle should be applied to the methodology in locating facilities within Dorset, so that they are located close to waste sources, and that individual waste collection, sorting and treatment facilities are located so that transportation between each is minimised.

The Waste Hierarchy

3.9 The waste hierarchy is a theoretical framework in which waste management options can be ranked for consideration in the BPEO process. The BPEO for a waste stream is likely to be a mix of different waste management options. The role of the Waste Local Plan is to make provision for a mix of waste management facilities within the hierarchy. A diagrammatic representation is set out below.

The Key Underlying Principles of the Plan

3.10 Establishing the BPEO encompasses consideration of social, environmental and economic factors and includes an assessment of the role of the proposal in the waste hierarchy, the contribution to regional self sufficiency, the location of the proposal in relation to the waste source and other national and local policy. This Plan assesses future likely arisings of municipal, industrial and commercial wastes and makes provision for their treatment and for disposal in accordance with BPEO principles by establishing a framework of integrated waste management facilities that needs to be provided. It is expected that industry will seek to provide these facilities.

3.11 In order to be in a position to establish whether a proposal represents the BPEO, the Waste Planning Authority will need to have sufficient information to reach a properly informed assessment of the extent to which the proposal fulfils the 'proximity principle' of locating waste management facilities (other than for highly specialised or regional facilities) close to its source. Applications for new or extended facilities will need to include a Transport Assessment appropriate to the scale of the development and the significance of the anticipated transport implications and provide an assessment of how the proposals relate to the points of production and to any intermediate facilities for its handling, and points for final disposal of residues.

3.12 Sustainable design, construction and demolition should be promoted for all major development. Local Authorities should encourage developers to carry out a "waste audit" of the quantity and types of waste likely to arise during the construction of a major new development and should establish how waste will be minimised and how materials will be re-used, preferably on site. In addition, developers should give consideration to the ultimate use of the development and the need to provide for on-site facilities for the re-use and recovery of waste materials, such as providing areas for recycling facilities.

Policy 1 – Guiding Principles

Planning permission will be granted for a range of waste management facilities with sufficient capacity to handle the equivalent of the waste arising in the plan area and contribute to achieving the regional and local targets for recycling, composting, recovery and diversion from landfill.

Planning permission will be granted for proposals which are consistent with policies and proposals in this Plan.

In considering proposals for planning permission for waste management facilities, the Waste Planning Authority will take into account:

i. the location of the proposed development in relation to the sources of waste, the destinations for any transferred waste and the markets for any recycled or recovered materials;
ii. the scale and type of facility proposed in relation to its contribution to meeting the needs of the Plan Area;
iii. traffic generation characteristics
iv. the environmental impact;
v. the extent to which the proposal would assist in moving the management of waste up the waste hierarchy.

Integrated Waste Management Facilities

3.13 There is a clear advantage when different types of waste management facilities are located close together or co-located on one site (for example, materials recovery and energy recovery facilities). This would reduce the overall volumes and cost of transport. For facilities that would form part of a wider linked series of processes, there is a need to consider a further key underlying principle for the Plan and Government policy of establishing an integrated and adequate network of waste management installations. For applications that require formal environmental impact assessment, it is anticipated that an assessment of the wider network of facilities and the extent to which they are well integrated, would form part of the submitted Environmental Statement.

Policy 2 – Integrated Waste Management Facilities

The development of integrated waste management facilities, or the provision of additional facilities to recover or treat waste at existing or proposed waste management sites so as to provide an integrated waste management facility, will be encouraged and where it is demonstrated that no unacceptable adverse traffic or other impact would arise, applications for such development will be permitted.

Chapter 4
Protection of the Environment

4.1 This chapter sets out the policies which seek to protect the natural and historic environment and quality of life for the residents of Bournemouth, Dorset and Poole. The Waste Planning Authorities are able to control waste management operations through imposing conditions on planning permissions, and where appropriate, additional controls are available through planning obligations and agreements. For most waste management facilities, planning powers are complemented by the licensing regime of the Environment Agency which aims to prevent or minimise the effects of pollution on the environment.

4.2 The policies should be read in conjunction with the supporting text and all policies should be applied together. Many policies may be pertinent to a particular waste management proposal and the decision making process will address the policies and the relative weight to be given to them.

Landscape Designations

Areas of Outstanding Natural Beauty

4.3 Areas of Outstanding Natural Beauty (AONB) are designated under the National Parks and Access to the Countryside Act, 1949. They are nationally important landscape areas sensitive to change, and the primary objective of their designation is one of conserving and enhancing their natural beauty. In the Plan area there are two Areas of Outstanding Natural Beauty; the Dorset AONB, and part of the Cranborne Chase and West Wiltshire Downs AONB, which extends into Wiltshire, Somerset and Hampshire. These areas cover some 50% of the Plan area. The national status of these statutorily designated areas requires a high level of protection. Applications in these areas will receive rigorous examination and proposals will need to be supported by justification, such as an overriding national need for the development or exceptional local circumstances.

Policy 3 – Waste Developments within the AONB

Proposals for waste developments within Areas of Outstanding Natural Beauty will be subject to the most rigorous examination. They will only be permitted in exceptional circumstances and when it can be demonstrated that the development would be in the public interest, where:

i. there is an overriding need for the facility which cannot be met, at a reasonable cost by an alternative acceptable site;
ii. there will be no unacceptable adverse impacts on the natural beauty of the area;
iii. it is demonstrated that high environmental standards will be maintained throughout operations

Landscape Character

4.4 Landscape refers primarily to the visual appearance of the land, including its shape, form and colours. It also reflects the way in which these various components combine to create specific patterns and pictures that are distinctive to particular locations. Waste developments can have an adverse affect on the local landscape in terms of disruption to and loss of local distinctive landforms. Proposals which would have an unacceptable adverse impact on features which make up the local landscape character (such as hedges, trees, water features, field patterns, boundaries, archaeological sites, buildings and artefacts) will not be permitted, unless satisfactory mitigation measures are proposed. Proposals that would result in the ultimate loss of key landscape features will not be granted.

Policy 4 – Landscape Character

Applications for waste facilities will be permitted where:

i. they are in scale and keeping with the local landscape/townscape character;
ii. there are no unacceptable adverse impacts on the local character of the landscape, taking into account mitigating measures;
iii. key landscape features are safeguarded.

Nature Conservation

International/European Nature Conservation Designations

4.5 European Habitats Directives provide for the conservation of habitats and the protection of species through the designation of Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and RAMSAR sites (internationally important wetlands). These areas form a network of internationally important wildlife sites within the European Union which is known as 'Natura 2000'. These designations can include priority habitats and priority species which are protected under the EC Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992. Priority natural habitats are those in danger of disappearance, for which the European Community (EC) have a particular conservation responsibility in view of the proportion of their natural range with the EC area.

4.6 Within Dorset there are 4 SPAs and Ramsar sites and 12 candidate SACs. Candidate SACs have not yet had their status confirmed by the European Commission as Sites of Community Importance, although full protection is conferred on these candidate sites in England under The Conservation (Natural Habitats, &c.) (Amendment) (England) Regulations 2000. Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9) and ODPM Circular 06/2005 set out statutory protection specific policies in relation to sites of international importance for nature conservation. Regulation 48 of the Habitats Regulations (1994) restricts the granting of planning permission for development which is likely to significantly affect a site of international importance for nature conservation, and which is not directly connected with or necessary to the management of the site, by requiring that an appropriate assessment is first carried out of the implications of the development for the site's conservation objectives. This assessment would determine the effect on site integrity.

4.7 Waste treatment processes adjacent to or in the vicinity of sites of international importance for nature conservation would have likely significant effects if they cause elevated concentrations of both ammonia and nitrogen oxides which could deposit on these sites. Applications for such waste developments should demonstrate that the proposed technologies, incorporating appropriate abatement methods, would not give rise to nitrogen deposition that would be likely to threaten the integrity of these nature conservation sites.

Nature Conservation – National Designations

4.8 A national network of Sites of Special Scientific Interest (SSSIs) has been designated by English Nature under the Wildlife and Countryside Act 1981. These are sites with geological, geomorphological or ecological characteristics that are of national significance. There are 138 SSSIs in Dorset. There are also 11 National Nature Reserves in Dorset all of which are SSSIs where active management for nature conservation (by or on behalf of English Nature) is a primary objective.

~~Policy 5 – National Designations~~

~~Planning applications for waste development which are likely to have an adverse impact on sites of national importance will not be permitted unless it can be demonstrated that the reasons for the waste development outweigh the national nature conservation interest. The assessment of adverse impact will take account of the scope for mitigation and/or compensatory measures to address the loss.~~

Nature Conservation – Local Designations

4.9 Locally important sites include Sites of Nature Conservation Importance (SNCIs) and Regionally Important Geological/Geomorphological Sites (RIGS). These are non-statutory designations but are important in the local context and comprise key elements in the network of important habitats. In addition, Local Nature Reserves (LNRs) are statutory designations declared by Local Authorities under the provision of the National Parks and Access to the Countryside Act 1949 in order to bring sites of established nature conservation value into active management for the public benefit.

Policy 6 – Local Designations

Proposals which are likely to adversely affect sites of regional or local importance will only be permitted where it can be demonstrated that the reasons for the development outweigh the local value of the site. The assessment of adverse impact and weight given in planning decisions will take account of the scope for mitigation and/or compensatory habitat enhancement measures which will be required to address the loss.

Wildlife Corridors and Stepping Stones

4.10 Most wildlife habitats lie outside designated sites, forming a complex matrix of more or less fragmented elements in the wider environment. The Habitats Directive 1994 requires Member States to encourage the management of features of the landscape which are of major importance for wild flora and fauna. These features are those which because of their linear and continuous structure act as corridors, or function as

stepping stones, which are essential for migration, dispersal and genetic exchange. Examples of such features include rivers with their banks, field boundary systems, ponds and small woods. Such features would also include UK* and locally identified Biodiversity Action Plan priority habitats and species. In circumstances where waste development is proposed it is considered that these features should be identified during the impact assessment process and opportunities for retaining wildlife links should be fully explored. There may also be opportunities for creating habitats to act as wildlife links as part of landfill restoration proposals. The aim of the policy is to avoid the net loss in the quality and extent of this wider habitat network in order to sustain population levels of many wildlife species.

*Listed under Section 74 of Countryside and Rights of Way Act 2000, published by DEFRA in 2002

Policy 7 – Wildlife Corridors and Stepping Stones

Where a proposal would lead to the unavoidable loss of, or adverse effect on, the role of wildlife corridors or features with demonstrable and significant nature conservation interest, mitigating measures or appropriate replacement habitats of at least equal quality will be sought.

The Protection of Species

4.11 Certain plant and animal species, including all wild birds, are protected under the Wildlife and Countryside Act 1981. Some other animals, such as badgers, are protected under their own legislation. The Conservation (Natural Habitats, &c.) Regulations 1994 (The Habitats Regulations) identify priority species that are afforded additional protection as a result of their European protected status.

4.12 By virtue of their nature and ecology, protected species are often found on land not otherwise recognised to be of value to nature conservation. The presence of a protected species is a material consideration when assessing a development proposal that would be likely to result in harm to the species or its habitat. PPG9 Nature Conservation advises that local authorities should consult English Nature before granting planning permission, and should consider using planning conditions and/or enter into planning obligations under which steps would be taken to secure the protection of the species. Mitigation proposals may be significant in considering the impact of planning applications on protected species.

4.13 Special considerations apply to developments that affect European protected species. Development licences to disturb species or their habitat, issued by the Government will only be granted under closely defined circumstances. It must be demonstrated that the development is required in the overriding public interest, that there is no satisfactory alternative, and that the proposed actions will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in its natural range. As a general principle, *in situ* conservation will be preferable to other options such as translocation to maintain favourable conservation status.

Policy 8 – Protection of Species

Development will not be permitted which would harm species of principal importance for the conservation of biodiversity in England, or the habitats of those species, unless the need for, and benefits of, the development clearly outweigh that harm.

The Historic Environment

Archaeology

4.14 Archaeological remains contain irreplaceable information about our past. The variety and unique character of the archaeological heritage contributes to our sense of place and cultural and social identity. Archaeological remains are a finite and non-renewable resource which are fragile and vulnerable to damage or destruction. It is important that they are not needlessly destroyed and that the most important monuments and their settings are protected.

4.15 The Historic Environment Record (which covers Bournemouth, Dorset and Poole) based at County Hall in Dorchester provides a register of Historic Buildings and archaeological information. One of their principal functions is to enable the identification of sites of known or potential archaeological importance. Applicants should give early consideration to whether archaeological remains exist on site. Where consultation with English Heritage and the Waste Planning Authority indicates that a site is archaeologically sensitive, an assessment and/or evaluation of the archaeological implications of development proposals will be required from developers with the methodology and techniques to be agreed with the Planning Authority.

Policy 9 – Archaeology

There is a presumption in favour of the physical preservation in situ of nationally important archaeological remains, and their settings whether scheduled or not. Therefore, proposals which would damage or destroy nationally important remains will not be permitted.

Where a proposal would destroy or degrade archaeological remains of less than national importance, permission will not be granted unless the need for the facility cannot be met from an alternative location and provision is made for the excavation and recording of the remains to a standard acceptable to the Waste Planning Authority.

Listed Buildings, Conservation Areas and Historic Parks and Gardens

4.16 Dorset contains a range of heritage features including over 13,500 Listed Buildings, over 200 Conservation Areas and 34 Historic Parks and Gardens. Buildings are listed because of their architectural or historic interest. Conservation Areas recognise the value of the groups of buildings within them and the character of the other spaces. The settings of Listed Buildings and Conservation Areas are contributory to their value and are therefore considered integral to the designation.

4.17 Government policy is that Planning Authorities should have special regard to the desirability of preserving Listed Buildings and should also pay particular attention to preserving or enhancing the character and appearance of Conservation Areas.

4.18 There are no statutory controls arising from the inclusion of a Historic Park or Gardens on English Heritage's register, but it will be a key material consideration in the determination of a planning application. For proposals affecting these areas applicants will be expected to provide evidence indicating that there are no suitable alternative locations available for example, within allocated industrial land, within or adjacent to existing waste management facilities or within urban areas.

~~**Policy 10 – Historic Parks and Gardens**~~

~~Proposals which would destroy or degrade the special qualities of a Registered Historic Park or Garden, will not be permitted unless it can be demonstrated that there is a need for the waste management facility which cannot be met from a less damaging location.~~

The Coast: Heritage Coasts and World Heritage Sites

4.19 Dorset's coast has long been recognised as one of its principal assets, and most of it is protected under planning controls for its outstanding wildlife, geological and scenic quality. Two stretches of coastline have been defined as Heritage Coast (the Purbeck and West Dorset Heritage Coast) within which there is an emphasis on their management for conservation in terms of quality and character. In addition, the Dorset and East Devon coast, running from Exmouth in Devon to Studland in Dorset, is a World Heritage Site, designated because of its important geological and geomorphological features. The extent of the designated area is limited to the low water mark up to the back of the beach or the break in slope at the top of the cliff scarp, whereas the Heritage Coast designation can run several miles inland. There are no additional statutory planning controls resulting from the designation of a World Heritage Site but the status does highlight the outstanding international importance of the site which will be a material consideration in considering planning applications.

4.20 Whilst there is unlikely to be a need to locate waste recovery or disposal facilities within these areas, the one possible exception to this would be sewage treatment plants serving coastal settlements or for discharge to coastal waters. Policy 11 below sets out the criteria against which proposals for waste management facilities within the Heritage Coast and World Heritage Site will be assessed. (Chapter 8 sets out the planning policy on sewage treatment facilities including development of such facilities within sensitive areas).

Policy 11 – Heritage Coast and World Heritage Sites

Proposals for waste management facilities within the Heritage Coast and/or the World Heritage Site will only be permitted where:

i. there is an overriding need for the facility which cannot be met by an alternative site outside the designated area, and where
ii. there will be no significant adverse effect on the natural beauty, bio-diversity, ecology, geological and geomorphological features of the area

Agricultural Land

4.21 Changing circumstances have led to a move away from maximising food production to seeking diversification of rural enterprise. The loss of lower quality agricultural land (that which falls within Grades 3b, 4 and 5) is therefore less of a constraint to development than in the past.

4.22 Government guidance in PPS7 Sustainable Development in Rural Areas establishes that the presence of best and most versatile agricultural land (defined as land in Grades 1, 2 and 3a of the Agricultural Land Classification) should be taken into account alongside other sustainability considerations (e.g. biodiversity; the quality and character of the landscape; its amenity value or heritage interest; accessibility to infrastructure, workforce and markets; maintaining viable communities; and the protection of natural resources, including soil quality) when determining planning applications. Where significant development of agricultural land is unavoidable, the use of areas of poorer quality land (Grades 3b, 4 and 5) should be sought in preference to that of a higher quality, except where this would be inconsistent with other sustainability considerations. The reclamation of mineral voids through infilling with waste may provide potential to restore land back to agriculture. The reclamation of land is covered in Chapter 7.

Policy 12 – Agricultural Land

Planning permission for waste development on the best and most versatile agricultural land will not be permitted unless it can be demonstrated that there is no satisfactory alternative location.

Water Resources

4.23 Waste management facilities can potentially have a significant effect on the water environment, including water quality and wildlife value. The planning system has an important role to play in the protection of the water environment through the determination of applications for waste management facilities. The protection of surface, coastal and groundwater resources is a major environmental factor in assessing the acceptability of proposed waste development. Factors such as topography, geology, hydrogeology and hydrology will need to be considered. Applicants will need to provide an assessment of the potential risk to the water environment and may be required to undertake a hydrological and geological survey appropriate to the nature of the development.

4.24 The Environment Agency (EA) is responsible for protecting and improving the water environment including the maintenance and improvement of water quality, conserving water resources, flood defence and the promotion of conservation and water-based recreation. The WPA will work in close liaison with the Environment Agency during the consideration of planning applications and will have regard to flood risk maps as published by the Agency on a quarterly basis, catchment abstraction management strategies for each river catchment, groundwater vulnerability maps and groundwater source protection zones in assessing the likely affects of any proposal.

Policy 13 – Water Resources

Proposals for waste development will not be permitted where:

i. there would be an unacceptable risk of pollution to surface, groundwater and coastal waters,
ii. it would affect the integrity or function of a floodplain,
iii. there will be an unacceptable risk from flooding affecting the site or an unacceptable increase of the flood risk elsewhere.

When proposals fall within (ii) above, applicant will be expected to demonstrate that there are no other suitable sites with a lower risk of flooding and provide details that the flood and pollution risks are acceptable. Where proposals are permitted sustainable drainage schemes, to tackle rates of water run off, should be incorporated wherever possible.

Quality of Life

4.25 Waste management facilities have the potential to cause disruption to local communities and their environment. Due to their nature, waste processing and recovery have similar impacts to other industrial processes which may include visual intrusion, traffic, noise, dust, odour and other emissions, litter and vermin. (The impact of traffic is covered in Policy 21). The potential impacts can be minimised by careful siting, landscaping and operational controls. Matters such as nuisance, litter and vermin are increasingly being controlled and monitored through the Pollution Prevention and Control regime and Waste Management Licensing regime rather than the planning system.

4.26 In order to minimise potential impacts opportunities for maximum enclosure of operations will be explored and for some types of operation, total enclosure may be necessary according to location. For landfill proposals enclosure is not practical and the level and nature of impacts will reflect the fact that the processes are carried out in the open air.

4.27 Applicants will be expected to demonstrate how potential impacts will be mitigated and/or controlled in accordance with current best site practice and recognised standards. Details of current best practice requirements are set out in Supplementary Planning Guidance *'Development Guidance for Minerals and Waste Facilities'*.

4.28 As part of the determination of a planning application for a waste management proposal, the surrounding land uses will be relevant and in areas where there are a number of industrial operations already in progress, account will be taken of the proposed additional impact on the area. Whilst the effects from individual sites may be acceptable, when combined with other nearby operations, the overall impacts may be unacceptable. Account will be taken of the scale and duration of the proposal and of other developments in the area, as well as impact in the landscape and residential amenity.

~~Policy 14 – Quality of Life~~

~~Proposals for waste management facilities will only be permitted where:~~

~~i. there is no unacceptable adverse effect on the amenity of established, permitted or allocated land uses likely to be affected by the proposal.~~
~~ii. mechanisms are proposed in accordance with best practice to mitigate adequately the adverse impact of the development through controlling noise, dust, litter, odours, other emissions, vermin and other impacts.~~
~~iii. there is no significant adverse effect on the recreational or tourism use of an area.~~
~~iv. it would not result cumulatively in a significant adverse impact on the existing landscape character and/or the amenity of nearby settlements.~~

Rights of Way

4.29 The rights of way network comprises footpaths, bridleways and byways. These provide access to the countryside and are also an important part of our heritage. The Planning Authority aims are to ensure the existing network of public rights of way is maintained, and to protect the amenity, convenience and recreational value of paths within or surrounding the site. Where development results in the temporary or permanent loss of any public right of way, an appropriate alternative route of at least equivalent interest and of a similar standard in terms of path structures should be provided.

Policy 15 – Rights of Way

Planning permission will not be granted for a waste management facility which would adversely affect the amenity, convenience and recreational value of a Public Right of Way unless:

i. the adverse impact of development on the Right of Way can be satisfactorily mitigated, or
ii. arrangements are made in advance of the development commencing to provide an alternative route of at least equivalent interest in terms of amenity, convenience and recreational value and that the route is of a similar standard.

Safeguarding Airports and Aerodromes

4.30 The disposal of biodegradable waste at landfill sites has the potential to attract large numbers of birds. Near airports and airfields this can create the risk of birdstrike for low flying aircraft. However, measures can be put in place to minimise the risk, for example biodegradable waste can be covered with inert material as soon as is possible, and various bird-scaring devices exist. Major civil and Ministry of Defence airports (such as Bournemouth International Airport and Yeovilton Aerodrome) are subject to statutory consultation procedures within a safeguarded area defined on a map by the relevant airport authority. At other aerodromes, the Government advises informal consultation with the aerodrome manager for proposals within a 13km radius.

~~Policy 16 – Safeguarding Airports and Aerodromes~~

~~Planning permission for a waste management facility will not be permitted unless any significant adverse effect on the safe and efficient operation of airports or aerodromes can be satisfactorily alleviated.~~

Green Belt

4.31 The fundamental aim of a Green Belt is to prevent urban sprawl by keeping land permanently open; the most important attribute of Green Belts is their openness. The other purpose of a Green Belt is to check the unrestricted sprawl of built up areas; prevent neighbouring towns from merging into one another; assist in safeguarding the countryside from encroachment; preserve the setting and special character of historic towns; and assist in urban regeneration by encouraging the recycling of derelict or other urban land.

4.32 Government policy is that whilst there is no prohibition of development, there is a general presumption against **inappropriate development** within green belts. Inappropriate development is by definition harmful to the purposes of a Green Belt and it is for applicants to show why permission should be granted. Very special circumstances to justify inappropriate development will not exist unless harm by reason of inappropriateness, and other harm is clearly outweighed by other considerations.

Safeguarding Sites

4.33 Sites suitable for waste management facilities are scarce and can be difficult to find. Therefore sites for re-use, recycling, treatment and landfill, need to be protected from potential development which could prejudice their future use. Within rural Dorset, the District Planning Authorities will be required to consult the County Council where significant development is proposed within appropriate consultation distances of existing and allocated built waste management facilities or landfill sites.

4.34 A "Waste Facility Consultation Map" will be prepared following adoption of the Plan and will show the location of all existing facilities and those allocated as reserved sites in the Waste Local Plan and the consultation distances considered appropriate around them. Applications for development will be opposed where they would sterilise an important land-use resource for waste management or where they would bring sensitive development into an area likely to be adversely affected by waste facilities or their access unless there is an over-riding need for the development, or satisfactory engineering and mitigation measures are proposed for the development which would alleviate any adverse effects from nearby mineral working or waste management operations.

Policy 17 – Safeguarding

Locations identified in the plan and existing sites for waste facilities should be safeguarded from sterilisation by other forms of development and action taken to ensure that sensitive development does not encroach into areas where it could be adversely affected by the operation of waste facilities.

Ground Stability and Investigation

4.35 National policy guidance (paragraph A37 of *PPG10 Planning and Waste Management*) states that "it is important that waste management and disposal sites and their environments are not liable to be affected by land instability. This might for instance damage containment precautions of landfill and landraising sites or affect buildings at other types of facility". In a similar vein, guidance related to contaminated land (paragraph 20 of PPS23 "Planning and Pollution Control") acknowledges that land contamination, or the possibility of it, is a material planning consideration in the preparation of development plan documents and in taking decisions on individual planning applications.

Ground Stability

4.36 Government guidance advises that Waste Planning Authorities should satisfy themselves that the stability of proposed sites has been properly investigated and that, where necessary, appropriate precautionary or remedial measures have been taken in the design.

~~**Policy 18 – Ground Stability**~~

~~Planning permission for waste management development in an area liable to ground instability will not be permitted unless an assessment is undertaken which indicates how the potential instability can be mitigated and resolved.~~

Ground Investigations

4.37 A part of the wider process of investigating ground conditions is the need to establish ground water patterns and to identify likely levels of containment and attenuation of (and potential pathways for) leachate or landfill gas migration. Such site investigation work also has a role in determining monitoring requirements, some of which may themselves require planning consideration. Special considerations will also apply to many developments on active or closed landfills, where ground conditions will be a significant factor in design and siting of new or extended waste management development.

Policy 19 – Ground Investigation

Applications for ground investigation work in connection with waste management sites will be permitted provided the applicant can demonstrate that:-

i. the proposed development does not have the potential to give rise to a significant adverse effect which could not be alleviated to the reasonable satisfaction of the planning authority on any interest of acknowledged importance;
ii. the proposed development makes provision for the reclamation of all disturbed land within the shortest practicable period of time.

A permission to carry out ground investigation work carries no presumption that a subsequent application for waste management development on the site would be acceptable in principle.

Ancillary Development

4.38 As new waste handling and processing operations are developed or as existing operations change there is often a growth in the range of ancillary buildings, structures, plant and equipment required. These features may include weighbridges, vehicle sheeting bays, site offices and mess rooms, compounds to accommodate landfill gas or leachate treatment plant, 'windy weather' and other netting systems, odour and dust suppression equipment, leachate or sewage pumping stations, fragmentisers, crushers, shredders and screens, extra bays for recyclate, skip storage, acoustic screens and fences, and plant for energy recovery. Ancillary development can frequently have environmental effects and impacts on amenity in their own right. Even where individual additional developments are not, of themselves, significant, there is considerable scope for significant incremental changes to occur. This can be exacerbated where a need develops for substantial modification of waste management facilities, such as where a facility is required to take on new and additional roles and functions not considered or contemplated when the facility was first permitted.

4.39 At the broadest level, new waste management facilities need to be located and designed to 'build in' sufficient scope to enable them to accommodate future ancillary developments with a reasonable degree of flexibility to accommodate unforeseen changes and new demands over time. In cases where further developments are already anticipated, planning applications will need to be accompanied by sufficient information (such as an illustrative or indicative 'Master Plan') to set the proposals within their wider context. However, there is also a need to ensure that those elements that can have significant impacts are given careful consideration.

Transport

4.40 By their very nature, waste management facilities can be significant generators of traffic. National planning policy guidance acknowledges the situation, by noting: "Many modern waste management facilities depend on a large throughput of materials, often based on large numbers of road vehicle movements. The resulting traffic can be a major source of local disturbance and is likely to be a significant environmental issue for many proposed facilities" (Paragraph A13 of *PPG10 Planning and Waste Management*).

4.41 For any proposed development that would generate significant new traffic, or substantially alter existing traffic flows, there is a need to ensure that the additional traffic can be accommodated satisfactorily. That involves consideration of the capacity of the highway network (and how this will alter over time) and of traffic and highway safety issues. It also needs to consider the environmental effects of the traffic and impacts on amenity, as well as the scope to reduce and mitigate any adverse impacts.

Safety and Capacity of the Highway Network

4.42 Where traffic issues are likely to be important for new sites or extensions to existing facilities, a 'Transport Assessment' (TA) will be required. For developments that require a formal Environmental Assessment, this transport assessment and its conclusions will normally form part of the submitted Environmental Statement. In all cases, early consultation with the Highways Agency is recommended to establish both the need for a TA and, where required, the specific matters that will need to be covered. The Highways Agency is an Executive Agency of the DfT and responsible for operating, maintaining and improving the strategic road network in England on behalf of the Secretary of State for Transport. They have a major role in delivering the Government's Ten Year Plan for Transport. As a result, the Agency must be consulted with regard to all proposed developments liable to have an impact upon that network. It must be satisfied that any impact will not be in any way harmful to the function of the network. This is why Transport Assessments for developments close to a Trunk Road must show that there will be no impact upon that route. In some cases, the Agency may agree an initially unacceptable scheme on the basis that it has been demonstrated via a Transport Assessment that highways improvements or other mitigation measures would adequately alleviate the problem and would be legally secured. Nevertheless, these measures also need to be in line with the principles and provisions of wider Government guidance, such as contained in PPG13 (March 2001). Transport Assessments must be carried out to the satisfaction of the relevant highway authorities and where any development is likely to impact upon the Trunk Road Network this must include the Highways Agency.

Policy 20 – Safety and Capacity of the Highway Network

Planning applications for waste management will, where appropriate, need to be accompanied by a Transport Assessment to ensure that:

i. there is no practical alternative to the use of road traffic;
ii. the engineering and structural integrity of approach roads will not be prejudiced by the development;
iii. development does not have an unacceptable adverse impact on public and highway safety;
iv. adequate, well screened, on-site parking, turning and loading facilities are provided;
v. suitably designed access can be provided with on-site facilities for cleaning vehicle chassis before leaving the site;
vi. the traffic generated by the development can be satisfactorily accommodated into the highway network without causing unacceptable adverse impacts upon people or the environment;
vii. any adverse impacts caused by the proposed development can be mitigated to the satisfaction of the waste planning authority and that such mitigation may be secured by a legal agreement and/or planning conditions.

Transport Impact

4.43 Applications for waste management facilities will be assessed against the impact on the amenity of occupiers of residential and other sensitive properties, as well as on people using nearby public paths and recreational areas. Applications will also be assessed against their impact on other environmentally sensitive areas including designated sites and others referred to earlier in this chapter. Where improvements and traffic management measures would be necessary to provide an acceptable solution, these will need to be the subject of agreements. Advice in PPG10 states that planning permission should normally be refused, especially where residential amenity would be seriously affected, if the existing road network is unsuitable and cannot be improved sufficiently as part of the application or through a highways agreement or through a planning obligation, and no alternative to road transport is available at reasonable cost. Where a proposal is otherwise acceptable, but such measures are not in place, there may be a need to set a ceiling on traffic levels or waste throughput.

Policy 21 – Transport Impact

Proposals for waste management facilities will not be permitted where the associated traffic would have an unacceptable effect on residential or other environmentally sensitive areas, in terms of noise, disturbance, vibration or safety, and that harm could not be avoided or adequately mitigated through an acceptable highways agreement, planning obligation and related package of works /traffic management measures or through appropriate planning conditions.

Non-Road Borne Transport

4.44 Guidance in *PPG10 Planning and Waste Management* states that opportunities for using forms of transportation other than road haulage should be considered actively and seriously by planning authorities when preparing waste development plans. There may be benefits such as cost, time and reduced adverse environmental impact to be gained by the use of non-road transport. However, such approaches have greatest potential in urbanised areas, where the presence and density of canal and rail infrastructure provides the basis for realising opportunities for non-road based transport where there is a need to move large and regular volumes along a set route.

4.45 In Dorset, where there are no canals, the main candidates (beyond localised use of such things as conveyors) would be proposals for rail sidings to handle wastes and wharves linked to sea-borne or coastal transport of wastes in bulk. The requirements to provide for self-sufficiency in waste management facilities, combined with the need to manage wastes close to source, mean that any such facility would need very rigorous examination, to ensure it represented the best practicable environmental option (BPEO) for the wastes concerned.

~~Policy 22 – Non-Road Borne Transport~~

~~Proposals for non-road borne transport links to existing or proposed waste management facilities will be supported~~

~~i. unless there are over-riding benefits from using road borne transport;~~
~~ii. where they would principally serve waste arisings from Bournemouth, Dorset and Poole;~~
~~iii. where their location and design would reduce any harm to the environment and amenity to acceptable levels.~~

Off Site Highway Improvements

4.46 Some proposals would only be acceptable where there is a reasonable degree of assurance that off-site works or traffic management measures would be provided and implemented in full. Any highway or traffic management works liable to impact on the Trunk Road Network will need to be determined in conjunction with and to the agreement of the Highways Agency.

Policy 23 – Off Site Highway Improvements

Where off site highway improvement or traffic management works are necessitated by the development of a waste management facility, that development will not be permitted unless arrangements are made to ensure that the necessary works will be implemented, either before the proposed development is operational or otherwise before the traffic associated with the development reaches the level of intensity which gives rise to the need for the works in question.

Using Major Road Network

4.47 The adopted Structure Plan defines the strategic road network as a combination of the primary and county distributor routes which accommodate more than local traffic. Given the potential for waste management developments to generate significant volumes of traffic, applicants/developers coming forward with proposals for such facilities will need to demonstrate that links to that main network either are already adequate to accommodate the extra traffic or to incorporate acceptable provision to

overcome any deficiencies in the standard of link available. The Highways Agency will need to be satisfied that the traffic generated by the development can be safely and adequately accommodated on that route at the time of the application and for 15 years following the commencement of operations. This will apply particularly to the east-west traffic route (A31(T) and A35 (T)).

Policy 24 – The Major Road Network

Proposals for waste management facilities will be permitted only where they are well located in relation to the strategic road network and where the location and layout of the site access to the public highway are acceptable and the traffic generated can be accommodated by both the local road network and the strategic road network.

Where the generated traffic will need to use either the A31(T) or the A35(T), rather than another strategic route, the Highways Agency must be satisfied that the traffic generated by the development can be safely and adequately accommodated on that route both at the time of the application and for 15 years following the commencement of operations.

Improvements at Existing Sites

4.48 Some waste developments have been operational for many years and often are controlled by planning permissions which lack the standards of control expected today. For example there may be little or no control over noise, hours of operation or numbers of lorries which may enter or leave the site. There may be no requirement to provide landscaping to screen the operation and on completion of working restoration requirements may fall short of those expected on modern day consents. Although the Environment Act places a duty on mineral planning authorities to review existing mineral consents, there is no such requirement for waste facilities. The Waste Planning Authority is therefore anxious to seek improvements through negotiation on all sites where this is considered a necessity. Policy 25 provides the basis for a voluntary mechanism for effecting environmental improvements. Opportunities for improvements may also arise through the PPC permit process.

Policy 25 – Negotiated Improvements

The Waste Planning Authority will seek to secure improvements at existing waste facilities that will reduce the environmental and other impacts of these facilities. The measures to secure such improvements may include:

i. minimising visual impact;
ii. minimising the impact of noise, landfill gas, leachate, smell, vermin, litter, traffic and other disturbance, insofar as those fall within planning control, and without prejudice to the requirement of any site licence/waste management licence;
iii. improvements to access, traffic management and routeing arrangements;
iv. protection, conservation and enhancement of features of geological, archaeological, historical or ecological importance or other features which may contribute to the appropriate beneficial after-use of the site;
v. ensuring progressive reclamation of landfill sites to an appropriate beneficial use.

Chapter 5
The Need for Facilities for Recovery and Disposal of Municipal, Industrial and Commercial Waste

Information on Waste

5.1 A good information base is needed for the development of the Waste Local Plan. Information on the amount of waste generated in Bournemouth, Dorset and Poole is available from a number of sources. The Environment Agency produce Strategic Waste Management Assessments (SWMA) for each region. The first of these documents was published in 2000 but deals with a data set from 1998/9, some of which is based on sample survey information and estimates. As this data is now several years old, it needs to be supplemented by more recent data. The SWMA deals with all forms of "controlled" waste.

5.2 The three Waste Disposal Authorities produce data annually on the amount of Municipal Waste collected during rounds, at civic amenity sites and from litter bins, street sweepings and beaches. This data shows the fate of the waste generated, for example the amount of waste recycled, composted or landfilled. This information is also collated by the Environment Agency through the SWMA although these are not published annually. The Environment Agency also collect data through 'gate returns' which show the amount of waste passing through each facility. (*'Gate returns' are commercially confidential and can therefore not be published*). The data on Municipal Waste is considered to be a fairly accurate data set. These information sources show that arisings in Bournemouth, Dorset and Poole in 2001/2 were around 420,000 tonnes.

5.3 Unfortunately, data on the far larger waste stream of Industrial and Commercial waste (820,000 tonnes in 2001/2) is not collected in any standardised way. The SWMA data for 1998/9 is based on a survey of some 20,000 business nationally which has then been broken down to a regional level. This data is therefore an estimate, but provides a valuable snapshot. The 'gate returns' can show how much Industrial and Commercial waste passes through facilities. These show for example that disposals in 1998/9 were over 470,000 tonnes (compared with the SWMA estimate for the same year which was around 369,000 tonnes: a substantial difference). The Waste Local Plan therefore uses this locally derived data on disposals when it is available.

5.4 Local data on precisely how much Industrial and Commercial waste is recycled is not available. However, the SWMA survey results for Bournemouth, Dorset and Poole show that around 59% is disposed of and 41% of waste is recovered/recycled. Therefore, a combination of sources of data are used in forecasting the amount of waste that will need to be managed throughout the life of the Plan.

5.5 A background paper on waste arisings and forecasting sets out a recent data set and more detailed calculations.

Existing Waste Management Facilities in Bournemouth, Dorset and Poole

5.6 There are existing permitted facilities for municipal and industrial and commercial wastes which will continue to make a contribution to meeting present and future needs. As at Summer 2004 the significant facilities (as shown on Map 1) include:

- 3 operational landfill sites taking biodegradable waste,
- 1 landfill site for biodegradable waste permitted subject to the signing of legal agreements.
- 1 landfill site for biodegradable waste with planning permission but with further landfilling dependent on preceding minerals extraction,
- A Materials Recovery Facility (MRF),
- 2 operational composting sites (plus a further 2 as yet to be implemented),
- 1 'in-vessel' composting facility
- 13 Householder Recycling Centres
- A comprehensive network of Waste Transfer Stations for Industrial and commercial waste.
- There is also a network of landfill and recycling sites for inert construction and demolition waste.
- Almost 400 'bring' sites (e.g. bottle banks)

5.7 Due to reasons of commercial confidentiality, data on the permitted capacity available at individual sites has been combined. The estimated permitted capacity is taken into account in assessing future needs, as set out in the following paragraphs.

Assessing Future Need for Waste Facilities

5.8 Forecasting the need for facilities over the Plan period is a key task as the forecasts will assist in estimating the capacity required to cater for the recovery and disposal of waste. This will indicate how much provision is needed and how many sites should be identified. To estimate the need for recovery and disposal facilities, the waste stream has been divided into two categories:

- Non-inert waste which comprises municipal waste (including waste collected from households, civic amenity sites and litter and sweepings) and the non-inert element of the industrial and commercial waste stream.
- Inert waste which is waste classified by the Environment Agency as inert and construction and demolition waste.

Need for facilities to cater for Non-Inert Waste

Forecasts

5.9 Municipal waste and non-inert industrial and commercial waste are subject to different assumptions for forecasting. The assumptions made in preparing each of the forecasts are as follows:

Municipal Waste
Arisings grow by 3.5% per annum (which was the average annual growth in arisings for Bournemouth, Dorset & Poole combined between 1992/3 and 1999/00)
Targets set out in the Government's "Guidance on Municipal Waste Strategies" will be met: ● Recycle/compost 33% of household waste by 2003/4 ● Recycle/compost 40% of household waste by 2005/6
Targets set out in the Government's "Waste Strategy 2000" are met: ● Recover value from 40% of municipal waste by 2005, ● Recover value from 45% of municipal waste by 2010 ● Recover value from 67% of municipal waste by 2015.
Targets set out in the EC Landfill Directive limiting biodegradable waste sent to landfill will be met: ● By 2010 75% of biodegradable waste produced in 1995 is sent to landfill ● By 2013 50% of biodegradable waste produced in 1995 is sent to landfill
That 10% by weight of all municipal waste recovered will end up in landfill as a residue following recovery.

Non-Inert Industrial and Commercial Waste
Arisings remain at recent levels throughout the Plan period
The target set out in the Government's Strategy 2000 (by 2005, reduce the amount of industrial and commercial waste sent to landfill to 85% of that landfilled in 1998) will be met.

Arisings of Non-Inert Waste

5.10 When the two non-inert waste streams have been forecast separately (because of the differing assumptions), and then combined, the overall forecast shows that over the Plan period (years 2001/2 – 2015/16) non-inert waste will amount to around 11.6 million tonnes. Recovery will amount to around 5.5 million tonnes, and disposals (including the residues from recovery processes that will need landfilling) will amount to 6.7 million tonnes.

Recovery Requirements for Non-Inert Waste

5.11 Although it is useful to know the overall requirement for recovery over the plan period (i.e. 5.5 million tonnes), it is the highest level of recovery required in any one year that indicates the level of annual plant capacity needed to meet recovery targets. Over the Plan period forecasts show that the highest levels of recovery will be in 2015/16 when capacity will be needed to cater for around 613,000 tonnes of waste.

5.12 There are existing recovery facilities and sites with planning permission, so having forecast the total and annual recovery requirements over the Plan period, an adjustment needs to be made to take account of existing capacity. This currently stands at around 115,000 tonnes per annum and comprises the Materials Recovery Facility at Hurn, two open air composting facilities at East Parley and Lodmoor, one in-vessel composting facility at East Parley, and one in-hall composting facility at Canford Magna and a further unimplemented planning permission for composting at Warmwell. Therefore 498,000 tonnes of extra capacity will be needed at the end of the Plan period. The three Municipal Waste Strategies identify the preferred technologies and facilities for dealing with municipal waste as follows:

- Bournemouth Borough Council – In-vessel compost facility and the next stage of the strategy will consider the need for energy from waste/recovery facilities.
- Dorset County Council – Indicates the need for Mechanical Biological Treatment, In-vessel composting, transfer facilities and household recycling centres.
- Borough of Poole – Indicates the need for a Materials Recovery Facility in Poole. The next stage of the Strategy will consider the need for a thermal treatment facility.

For Industrial and Commercial waste, although no specific additional needs have been identified it is expected that typical needs will be for transfer and sorting facilities, some of which may be specialist facilities.

5.13 It is assumed that facilities such as major composting plants and Materials Recovery Facilities would each be capable of processing 50,000 – 100,000 tonnes of waste per year. It is also assumed that Mechanical Biological Treatment sites could treat 120,000 tonnes per year, including at least 80,000 tonnes of Municipal Waste. On this basis the plan needs to identify up to 10 sites to treat non-inert waste, including 3 to 4 sites for MBT facilities or similar. Chapter 6 identifies specific sites and includes information and policies on each main technology.

Disposal Requirements for Non-Inert Waste

5.14 The forecasts suggest that around 6.67 million tonnes of non-inert waste will require disposal over the plan period. This 6.67 million tonnes needs to be covered with inert material to prevent odour and other nuisances. The Plan assumes this cover material will be around 10% of the volume of waste requiring disposal, although this figure may sometimes be greater. The Plan also assumes that 1 tonne of non-inert waste is equivalent to 1 cubic metre in volume. The total landfill space required will therefore be 6.67 million cu.m plus 0.67 million cu.m of inert cover material, giving 7.3 million cubic metres. The 0.67 million cu.m of inert cover is equivalent to about 1 million tonnes at an assumed conversion of 1.5 tonnes per cubic metre.

5.15 However there is already some existing capacity for disposal of non-inert waste at 4 sites, which will operate for all or part of the Plan period, and a further site at Trigon with permission subject to legal agreement. The likely void capacity available at these permitted sites during the Plan period is estimated to be around 6.8 million cu.m. This results in a shortfall of around 0.5 million cu.m.

5.16 Whilst the Plan makes provision for a 3.5% growth per annum in arisings, the current climate is one in which waste minimisation is being actively encouraged and recycling and recovery are being legislated for. This indicates that we cannot continue to rely on landfill as we have done in the past. Given this emphasis on minimisation and recovery it is considered that the Plan should avoid making over provision for disposal facilities in order to encourage investment in more sustainable facilities. It is therefore proposed that no further sites are allocated for disposal of non-inert waste and that the level of shortfall be closely monitored and reconsidered at Plan review (see paragraphs 1.4, 7.10 and 9.6). Chapter 7 on the Final Disposal of Waste sets out the policies against which applications will be assessed.

Need for facilities to cater for Inert Waste

5.17 Inert waste, for the purposes of the Plan, includes waste classified by the Environment Agency as inert and construction and demolition waste. The Landfill (England & Wales) Regulations 2002 require all landfills to be classified as sites for either

hazardous waste, for non-hazardous waste or for inert waste. There are no hazardous landfills in the Plan area and none is proposed in the Plan. Classification of existing landfill sites into non-hazardous or inert was completed during 2005. The Landfill Directive defines inert wastes as insoluble, inorganic materials, which means that many of the wastes currently sent to inert landfills will in future need to be sent to non-hazardous landfills instead. The implications of this change and the adequacy of provision for disposal requirements included in the Plan will need to be closely monitored, and additional provision made if appropriate in a future waste development document. The implications for the engineering of non-hazardous landfills, resulting from a reduction in available inert material, will also need to be monitored.

Forecasts

5.18 The following assumptions have been made in forecasting provision for inert waste:

- Arisings remain constant at the average level over the 3 years 1998/99, 1999/00, 2000/01
- 72% of all industrial and commercial waste is inert
- The Government Target set out in Waste Strategy 2000 that limits the amount of industrial and commercial waste going to landfill will be met. This limits waste to landfill from 2005 onwards to 85% of that going to landfill in 1998.
- Recovery will continue at current levels until imposition of the Government's target (an increase over current levels of recovery) and continue at that level for the remainder of the Plan period.

Projections for Inert Waste

5.19 It is estimated that over the Plan period inert waste will amount to around 8.8 million tonnes, with around 4.1 million tonnes being recovered. Total disposals over the Plan period are projected to be around 4.7 million tonnes.

Recovery Requirements for Inert Waste

5.20 Although it is useful to know the overall requirement for recovery over the Plan period it is the highest level of recovery in any one year that will show how much plant capacity is needed to meet recovery targets. Over the Plan period, projections show that the highest levels of recovery will be needed between 2005 and 2016, when capacity will be required to cater for around 290,000 tonnes of inert waste. Current recovery capacity is difficult to gauge, but is estimated to be in the region of 135,000 tonnes per annum. A further 155,000 tonnes of annual capacity will be required. If it is assumed that an average facility would process between 50,000 and 100,000 tonnes of waste per annum it is likely that the Plan will need to allocate between 2–3 sites for recovery facilities catering for this type of waste.

Disposal Requirements for Inert Waste

5.21 As at summer 2002 there were 18 landfill sites taking inert waste, although only a number of these have capacity for further substantial infilling. Current permitted landfill sites are estimated to have capacity in the region of 1.4 million m^3 (*equivalent to around 2.1 million tonnes of inert waste at a conversion rate of 1.5 tonnes/m^3*).

With around 4.7 million tonnes needing disposal over the Plan period and current capacity for 2.1 million tonnes, a remaining 2.6 million tonnes requires disposal (1.7 million m^3 of landfill space).

5.22 However around 1 million tonnes of this inert waste is likely to be used within non-inert landfill sites as daily cover. If this is deducted from the 2.6 million tonnes requiring disposal the shortfall is reduced to 1.6 million tonnes. This would require a capacity of around 1 million m^3 (paragraph 5.14).

5.23 Chapter 6 sets out land use policies on recovery facilities for inert waste. Chapter 7 sets out the 2 sites allocated to meet the need for disposal and recycling. There is also a need for facilities in the west and north of Dorset which is geographically remote from the major sites.

Chapter 6
Facilities for the Recovery of Materials or Energy from Waste and Proposals

6.1 In order to comply with the Landfill Directive, the Government's Waste Strategy 2000 establishes the following targets for the management of municipal and industrial and commercial wastes:

- To recover value from 40% of Municipal waste by 2005
- To recover value from 45% of Municipal waste by 2010
- To recover value from 67% of Municipal waste by 2015
- By 2005 to reduce the amount of industrial and commercial waste sent to landfill to 85% of that landfilled in 1998.

6.2 To achieve these targets, provision will have to be made for a range of recovery facilities. Recovery means to obtain value from waste either as material treatment (recycling, composting, anaerobic digestion) or through energy recovery. Energy recovery includes the manufacture of refuse derived fuels, gasification, pyrolysis, combustion (incineration with direct or indirect use of the energy produced), the utilisation of methane from landfill sites and other technologies.

6.3 Recovery facilities are akin to industrial and manufacturing operations in terms of suitable locations, the requirements for land and the associated impacts. For example, recovery facilities may be suitable on industrial and employment land, adjacent to existing waste management sites, or on previously used 'brownfield' land. This chapter indicates the preferred locations for waste management facilities to serve the various communities within Bournemouth, Dorset and Poole.

The Identification of Sites

6.4 The Plan identifies preferred sites for recovery and treatment facilities. In the case of landfilling of inert waste in north and west Dorset it has not been possible to identify preferred sites. Determination of applications will therefore be carried out using the criteria set out in policies 41 and 42 of this plan. The acceptability of all sites will of course be tested through the planning application procedures and will be subject to meeting the other criteria and policies set out in the Plan.

Summary of the Site Selection Process

6.5 The Preferred Sites have been identified through a consistent methodology as set out in brief below: The site selection process looked at the following areas of land:

- Industrial and employment land and brownfield sites over 1.5 hectares that would be available in the next 5 years.
- Existing minerals and waste management sites.
- Allocations made in the adopted Minerals and Waste Local Plan.
- Sites put forward as a result of the consultation exercise in the Waste Local Plan Pre-deposit Consultation on Issues (March 2001).

6.6 This exercise resulted in a list of around 90 potential locations. The next stage of the exercise was to assess the need for facilities in each location. This included making an estimate of the likely amount of waste that would be generated and the proximity to the source of waste arisings. Guidance was sought from the Municipal Waste Management Strategies on need. Once evidence indicated that there was a need for a facility to serve a particular community, a sieve mapping exercise was carried out to identify potential constraints, including:

- Whether the site would allow for co-location of facilities and/or expansion
- Proximity to sensitive land uses (including dwellings)
- Proximity to nature conservation designations
- Proximity to landscape designations (including green belt)
- Suitability of the surrounding highway network
- Impact on floodplains and water protection zones.
- The feasibility of developing the sites for waste management uses was further explored through negotiations with local planning authorities and landowners and agents.

6.7 Following these assessments only 13 sites with potential were identified. These were reduced to 10 following the Local Plan Inquiry and the receipt of the binding Inspector's Report. This illustrates the significant difficulties associated with finding suitable locations for essential waste management facilities because of the high level of designations within the Plan area and competition for sites with more traditional employment uses. More detail on the site selection process is set out in the background paper 'The Selection of Sites for the Bournemouth, Dorset and Poole Waste Local Plan First Deposit (Revised September 2004)'.

Schedule of Preferred Sites and Potential Uses

6.8 The sites proposed in this Plan are set out in Schedule 1. It should be noted that:

- Potential uses have been listed where there is a recognised need for the type of facility in that broad location. Recognised need arises principally from the Municipal Waste Strategies.
- Other facilities may be suitable at certain locations particularly to serve the industrial and commercial waste sector even though a specific need has not as yet been identified. This is especially the case where the sites already house, or have the potential to house business and industry – i.e. employment or industrial land.
- More than one site may be suitable for a technology and this does not imply that facilities will be built at all the sites.
- The Inset Maps indicate the Preferred Sites
- Site assessments accompany each Inset Map and set out the planning context.

Schedule 1			
Site & Inset No.	**District/ Borough**	**Location**	**Potential Use(s)**
1	West Dorset	Warmwell Quarry & Landfill *Comprising:* *Area 1a – Recycling Area* *Area 1b – Inert Landfill Area*	● Inert Landfill ● Aggregates recycling
2	Purbeck	Land North of Victoria Avenue, Swanage	● Household Recycling Centre
3	Purbeck	Winfrith	● Mechanical Biological Treatment with Refuse Derived Fuel
4	Christchurch	Bournemouth Airport	● Mechanical Biological Treatment with Refuse Derived Fuel
5	East Dorset	Henbury Pit *Comprising:* *Area 8a Inert Landfill* *Area 8b Recycling area*	● Inert Landfill ● Material recovery/recycling operations for inert, construction and demolition waste
6	Poole	Borough of Poole Hatchpond Depot	● Thermal treatment with energy recovery ● Materials Recovery Facility (MRF) ● Transfer of municipal wastes
7	Poole	Borough of Poole Nuffield Civic Amenity Site	● Materials Recovery Facility (MRF) ● Transfer of municipal wastes
8	Bournemouth	Millhams Lane Civic Amenity Site	● Materials recycling and recovery (There is limited potential for physical expansion of the site, but it may be possible to accommodate additional processes within the existing physical boundary.)
9	Purbeck	Binnegar Quarry	● Aggregates recycling ● Materials Recovery Facility (MRF) ● Composting ● In-vessel composting
10	Poole	Canford Magna	● Existing permission for in-vessel composting ● Aggregates Recycling (Existing operations capable of expansion)

6.9 The nature of sites which may be suitable for major waste management facilities (such as MBT, pyrolysis/gasification and in-vessel composting plants) means that they cannot be effectively safeguarded and there will be competition from other uses. However, provision of facilities in the right strategic locations is fundamental to delivering the municipal waste strategies and meeting targets. The Waste Local Plan must therefore recognise that, for any of a variety of reasons, development at the Preferred Sites may not be possible. If this happens, other sites within the same broad location will need to be considered.

6.10 If the Preferred Sites are not available, the need to find sites to serve the waste management requirements of specific communities may require sites to be considered that do not fulfil all the criteria in this Plan. For any such exceptions or departures from the Plan there would need to be a clear case of need established that cannot be met on other, less constrained sites within the area. In the case of sites within Green Belt, there would also need to be clear evidence that very special circumstances existed as explained in paragraph 4.32.

Policy 26 – Applications falling within sites identified in Schedule 1

Within the sites and for the potential uses set out in Schedule 1, applications for waste management facilities will be permitted provided that the application demonstrates to the satisfaction of the Waste Planning Authority that the proposal complies with the other relevant policies of this Plan.

Many of the policies that follow apply to particular types of waste facility. Any proposal for a facility not subject to Policy 26 will need to comply with the policies relevant to that type of facility.

Facilities for recycling or recovering resources from waste

Local Small Scale Recycling Facilities

6.11 Local, small-scale or "mini" recycling facilities (such as bottle and clothing banks) within or close to each community will be necessary if the Government targets for the recovery or recycling of wastes are to be achieved. In circumstances where planning permission is required for such small scale facilities, Policy 27 identifies that the Planning Authority will favourably consider proposals for such facilities, provided that they are located and designed to avoid impact on the local area. The aim is to achieve one facility for every significant settlement/community of up to 500 people and one facility for every 500 head of population thereafter.

Policy 27 – Small scale recycling facilities

Where planning permission is required the Local Planning Authority will permit proposals for local small-scale recycling collection points at appropriate locations within, or in close proximity to, local communities, subject to the following criteria:

i. it has an adequately positioned and designed pedestrian and vehicular access to accommodate the anticipated level of movements it will generate;
ii. it provides suitably hard-surfaced and drained off-road parking and turning space for vehicles using or servicing the site;
iii. it is located, designed and operated to minimise impacts on the amenity of the local area particularly with regard to potential problems of noise, pollution and visual intrusion.

Household Recycling Centres

6.12 Household Recycling Centres are sites which provide householders with a place to dispose of their bulky waste and other waste items. They are also known as Civic Amenity Sites. The deposit of waste by the householder normally takes place in the open air on areas of hardstanding with a circulation system and bays for unloading materials. Alternatively, the householder places the waste delivered to these sites into material specific containers. Much of the waste deposited at these sites is recycled or composted. The sites usually have a need for surface drainage and collection systems. Household Recycling Centres may also include enclosed areas and buildings for the bulking of waste or the delivery of waste from the householder. The sites usually include bottle, paper, oil, battery, scrap metal and clothing banks. Sites should be located within or close to the centres of population to maximise use.

Policy 28 – Household Recycling Centres

Proposals for new Household Recycling Centres will be permitted where located close to the population they are intended to serve, and:

i. within allocated or permitted employment land; or
ii. on land or within buildings previously used for employment/industrial type uses; or
iii. within existing landfill operations and restricted to the life of the landfill operations; or
iv. within or adjacent to other waste management facilities; and
v. the proposal provides for the separate circulation for household and commercial vehicles; and
vi. to meet an identified need within Bournemouth, Dorset and Poole.

Waste Transfer Stations

Waste Transfer Stations

6.13 Waste Transfer Stations operate across the Plan area and deal with a wide range of wastes including municipal, commercial, industrial and demolition wastes and general "skip" waste. These sites can include the bulking up of smaller quantities of recyclables and waste to produce an economical load for transportation, or the sorting of wastes. Often the wastes taken to these sites are sent on for recycling. Specialist Waste Transfer Stations may deal with a single type of waste only, such as asbestos.

6.14 Key considerations for the location of Waste Transfer Stations are proximity to the principal sources of waste and good access to the primary road network. There is a network of existing Waste Transfer Stations in Bournemouth, Dorset and Poole, many of which operate effectively and with minimal impact on local amenity. The tightening of licensing of operations, pressure to increase the range of materials recycled and sorted and commercial success may lead to applications for extensions or significant amendments to these sites. This presents an opportunity to secure environmental benefits especially for sites in designated and sensitive areas.

Policy 29 – Waste Transfer Stations or extensions to existing Waste Transfer Stations

Proposals for new Waste Transfer Stations or extensions to existing Waste Transfer Stations will only be permitted:

i. within allocated or permitted employment land; or
ii. on land or within buildings previously used for employment/industrial type uses; or
iii. within or adjacent to other waste management facilities; or
iv. within or adjacent to agricultural built development only where opportunities in i, ii, iii above have been explored and discounted.

In addition, proposals will only be permitted where the reception, handling and processing takes place in a fully enclosed building, unless there would be no proven benefit from such enclosure.

Waste Management Centres

Waste Management Centres

6.15 Waste Management Centres include the household recycling element covered above and can also provide a sorting and transfer facility for municipal and industrial and commercial wastes. The purpose of the latter is to collect together relatively small amounts of waste until sufficient quantities are accumulated to justify transportation to the relevant waste management facility. These centres are used to save freighter time on the road and to improve the economics and environmental impacts of waste haulage.

Policy 30 – Waste Management Centres

Proposals for new Waste Management Centres will be permitted where located close to the population they are intended to serve, and:

i. within allocated or permitted employment land; or
ii. on land or within buildings previously used for employment/industrial type uses; or
iii. within existing landfill operations and restricted to the life of the landfill operations; or
iv. within or adjacent to other waste management facilities; and
v. the proposal provides for the separate circulation for household and commercial vehicles; and
vi. to meet an identified need within Bournemouth, Dorset and Poole.

Materials Recovery Facilities

Materials Recovery Facilities

6.16 Materials Recovery Facilities (MRFs) deal with the separation and sorting of different components from the waste stream. There are two types of operation. Most commonly, 'Clean MRFs' receive mixed or segregated recyclable waste from kerbside collection schemes and bottle banks. However, others are designed to receive unsorted household waste, i.e. the whole bin contents (dirty MRF). When received, the waste is sorted (either by hand and/or mechanically) into recyclable and non-recyclable materials. The materials may be stored on site prior to final disposal or for reprocessing.

Policy 31 – Materials Recovery Facilities

Proposals for Materials Recovery Facilities will only be permitted where located:

i. within allocated or permitted employment land; or
ii. on land or within buildings previously used for employment/industrial type uses; or
iii. within existing landfill operations and where appropriate restricted to the life of the landfill operations; or
iv. within or adjacent to other waste management facilities; and
v. where the proposal provides for all operations including the reception, handling, processing and storage of the waste and residue to take place within an enclosed building; and
vi. to meet an identified need within Bournemouth, Dorset and Poole.

Recycling of Inert and Consruction and Demolition Waste

6.17 Inert, construction and demolition waste arises from the construction, repair, maintenance and demolition of buildings and structures. Inert recycling centres crush, screen and sort construction and demolition waste to form 'secondary aggregates'. The introduction of the Landfill Tax has significantly increased the recycling of inert wastes, which has been further reinforced following the introduction of the Aggregates Tax in April 2002.

6.18 Facilities include large machinery for the unloading, crushing and screening of the material and several stockpiles. The operations usually take place in the open air and therefore sites will need to be carefully located, away from dwellings and other sensitive land uses. Visual and acoustic screening and dust suppression measures may be necessary. Suitable locations may be at landfill sites and quarries where operations are linked to these other uses.

Policy 32 – Recycling or Inert and Construction and Demolition Waste

Proposals for recycling of Inert and Construction and Demolition Waste will be permitted in cases where they accord with other relevant policies in the Plan.
In addition where proposals are located within landfill sites or quarry operations they will, where appropriate, be restricted to the life of the landfill or quarry operations.

Vehicle Dismantling and Metal Scrapyards

6.19 In October 2000, the European Commission adopted the Directive on End of Life Vehicles (Directive 2000/53/EC) which seeks to make vehicle dismantling and recycling more environmentally friendly, sets clear quantified targets for reuse, recycling and recovery of vehicles and their components and requires producers to manufacture new vehicles also with a view to their recyclability. The implementation of this Directive may lead to the closure of sites as the licensing requirements will be significantly more stringent than in the past. Consequently, there may be a need for new sites or extensions to sites in order to meet the requirements of the Directive. Policy 33 identifies that scrapyards should be located on employment or industrial land where the potential impacts can be adequately mitigated. This type of use may also be suitable as temporary operations at landfill sites. Due to the intrusive nature of scrapyard (metal recycling sites) operations, as they are usually largely carried out in

the open air, account will be taken of the compatibility of operations with neighbouring uses. Applicants will be expected to demonstrate how the proposal accords with the other policies in the Plan especially those relating to the protection of amenity (Policy 14 – Quality of Life).

Policy 33 – Metal Recycling Sites

Applications for new sites will only be permitted:

i. on land allocated or permitted for employment or industrial use;
ii. as a temporary operation at existing landfill operations unless a permanent operation would not give rise to unacceptable impacts and where the potential impacts can be adequately mitigated.

For new sites and extensions to existing sites applicants are expected to provide evidence to indicate how the proposed operations will be compatible with existing neighbouring uses.

Composting

Background Information on Composting

6.20 Composting involves the breaking down of biodegradable material by micro-organisms in conditions where oxygen is present. Composting of "green waste" (grass cuttings, leaves, prunings and similar garden waste) is a well established process on a domestic scale, and increasingly so at a commercial scale. Composting can only treat the portion of waste that is made up of organic material, as only these materials are biodegradable. It is estimated that between 30% and 40% of household waste is readily compostable. This estimate should not be confused with the assumption that 62.5% of municipal waste is biodegradable (from Waste Strategy 2000). Collected materials can be composted in open-air facilities where they are shredded, mixed and then turned on a regular basis. Alternatively, composting can take place in buildings that are designed to contain waste and deal with any environmental impacts arising from the composting.

6.21 There is a concern, however, about the use of composts that may have contained animal remains such as fish, meat and poultry remains from household kitchens. Under the Animal By-Products Order 1999, such compost cannot be used on land, except in certain circumstances that are described in paragraph 8.15.

6.22 Advice will be sought from the Environment Agency on planning applications in relation to the potential for health effects from bioaerosols (including bacteria and fungal spores). At August 2001, the Agency's position on composting is that *'there will be a presumption against permitting (and to object to any planning application) of any new composting process (or modification to an existing process) where the boundary of the facility is within 250 metres of a workplace or the boundary of a dwelling, unless the application is accompanied by a site-specific risk assessment which shows that the bioaerosol levels are and can be maintained at appropriate levels at the dwelling or workplace'.*

6.23 All composting operations generate ammonia as a by-product of the digestion process. There is evidence that elevated concentrations of ammonia can damage certain habitats and the gas has the potential to affect sites of national and international importance for nature conservation in Dorset. Where composting is proposed adjacent to or in the vicinity of these sites it is likely that facilities would need to be enclosed and to incorporate appropriate ammonia abatement technology.

Windrow or Open Air Composting

6.24 The simplest form of composting is where collected materials are composted in open-air facilities where they are shredded, mixed and then turned on a regular basis. Windrows are long piles of material up to 3 metres high. Sometimes, in order to save space, the material is piled into heaps but ideally should still be limited to around 3 metres high. The material being composted is mostly broken down in the middle of the pile and this means that the pile has to be turned regularly to get fresh material to the middle. This technique would only be used for garden waste.

6.25 This type of operation would probably involve ancillary facilities for the reception of waste materials and removal of product. Machinery will also be used for forming the windrows and turning materials. As this type of composting takes place in the open air there is potential for impacts from noise, dust, odour and other nuisances, as well as the dispersal of ammonia and bioaerosols. Suitable locations will therefore be dictated by neighbouring uses and should ideally be located outside residential areas or other sensitive land uses and away from designated nature conservation sites sensitive to ammonia emissions such as heathlands. Open air composting may be appropriate in landfill sites, quarries, industrial estates and on lower quality agricultural land (Grades 3b, 4 or 5) or within agricultural built development. Advice will be taken from the Environment Agency on the acceptability of the proposed location in relation to distance to nearest occupied buildings and the dispersal of bioaerosols. The Environment Agency has issued a position statement on the regulation and permitting requirements of composting facilities. This recognises the risks to human health from such activities and requires all applications within 250m of a dwelling place to provide a site specific risk assessment for bio aerosols potentially released from the process. Proposals will need to satisfy the requirements of the Environment Agency in relation to the potential release of bio-aerosols and include a site specific assessment where required.

Policy 34 – Open Air Composting

Proposals for Open Air Composting and the associated waste reception and/or baling facilities will only be permitted where they are located:

i. on land or within buildings previously used for employment/industrial uses;
ii. on lower grade agricultural land and using agricultural buildings which do not require substantial alteration;
iii. within existing landfill or quarry operations and where appropriate restricted to the life of the site;
iv. within or adjacent to other waste management facilities.

Baling facilities will not be permitted unless contained within a building.

In-Vessel Composting

6.26 Carrying out the composting in an enclosed environment can ensure that conditions and impacts are better controlled. This can be in something no bigger than a shipping container, in a large shed or purpose built vessels. Composting in a vessel allows the flow of oxygen and the temperature of the process to be controlled. This is vital if mixed garden and kitchen vegetable wastes are to be composted, but it also allows the composting to be completed quicker and the resulting product may well be of a higher and more consistent standard. This form of composting can be applied either to separated wastes (if a saleable product is to be produced) or to mixed household waste if the intention is simply to reduce its biodegradability prior to landfilling.

6.27 In-vessel composting is in effect an industrial process and it is considered to be best located on land allocated for employment/industrial use, within previously used industrial or agricultural built development which does not require substantial alteration and within or adjacent to other waste uses. Key considerations will be the level of traffic movements and the visual impact of the plant. The traffic impact of proposals is considered in Policy 21.

6.28 The buildings for receiving, handling and processing would be industrial in nature. The Local Planning Authority expect all handling and processing of waste to be carried out within an enclosed building thus minimising the potential for dispersal of bioaerosols, noise, dust, odour and other nuisances. Where in-vessel composting is proposed adjacent to or in the vicinity of sites of international importance for nature conservation appropriate technology for the abatement of ammonia and nitrogen oxide emissions would be required to prevent significant adverse effects on the habitats.

Policy 35 – In-Vessel Composting

Proposals for in-vessel composting plants and the associated waste reception facilities will only be permitted where they are located:

i. within allocated or permitted employment land; or
ii. on land or within buildings previously used for employment/industry/agriculture which do not require substantial alteration; or
iii. within existing landfill operations and where appropriate restricted to the life of the landfill operations; or
iv. within or adjacent to other waste management facilities; and
v. where all reception, handling and processing of the waste and residue will take place within an enclosed building.

Mechanical Biological Treatment (MBT)

Mechanical Biological Treatment (MBT) and Refuse Derived Fuel (RDF)

6.29 MBT plants primarily accept residual waste that cannot be recovered for recycling and composting. A typical MBT plant, with an associated RDF plant, accepting 120,000 tonnes of waste per year requires a site of approximately 3 hectares (7 acres). The MBT process can typically be housed in industrial-type buildings and any level of architectural design can be applied to make them more visually attractive. It is anticipated that the MBT plant and the RDF plant will be located at the same site, although they can be located apart from each other. The plant will receive approximately 100 vehicles a day.

6.30 Every MBT plant is designed for a particular purpose and in practice the mechanical and biological processes can be combined in different ways to meet that purpose. A typical process is described below.

6.31 The treatment has two main stages, a mechanical stage and a biological stage. During the mechanical stage the incoming waste is chopped up to make it a more uniform size, typically 50 to 80mm, which makes it easier to handle. It is also put through a series of different sized screens to separate it into 'fractions'. At this stage any metals in the waste will be taken out for recycling. The mechanical stage leaves two main fractions:

- Mainly organic matter which goes on to the biological stage
- Mainly paper products, timber, plastic and textiles. This will not respond to the rapid treatment for the biological stage but does have a high calorific value as fuel, a Refuse Derived Fuel (RDF).

6.32 The fraction that is mainly organic matter then goes on to the biological stage. This process can be either a composting process or anaerobic digestion. Typically, the waste is composted inside the enclosed building for a 2 – 6 week period to give an optimum reduction in weight. The composting hall will operate under negative pressure, which means that air is continually sucked into the building. The air will then be sucked down through the composting material before being taken out of the building through pipes and discharged through a biofilter. As well as ensuring no fumes or smells can escape, the process of sucking the air through the composting material also helps to drive the composting process. This treated waste is then landfilled. If a productive use for this material is established and proven, it will be utilised where possible.

6.33 The other fraction left from the mechanical stage can be used as RDF. This is prepared fuel as it will be a relatively clean mix of paper, card, wood, textiles and plastics, and different from the mixed household residual waste which is used for mass-burn incineration. This fraction has a calorific value of 12.5 to 13.5 MJ/Mg, which is higher than low-grade coal and a relatively high energy value can be recovered from it. The RDF will be converted to energy by either the use of controlled combustion or one of the emerging technologies of gasification or pyrolysis.

6.34 A typical MBT and associated RDF plant accepting 120,000 tonnes of waste a year will result in:

- 5000 tonnes of metal for recycling
- 55,000 tonnes of treated waste from the biological stage
- 2000 tonnes of ash from the RDF plant

Depending on the efficiency of the technology, the RDF plant may be able to generate heat and around 4MW of power for local use or export to the national grid; this is enough to power 800 homes. The remainder of the input tonnage is lost in the conversion of the RDF to electricity and during the composting process as organic matter is converted to carbon dioxide and water vapour. Where MBT and associated RDF plants are proposed adjacent to or in the vicinity of sites of national and international importance for nature conservation supporting habitats sensitive to the emissions from these developments, appropriate technology for the abatement of ammonia and nitrogen oxide emissions would be required to prevent significant adverse effects on the habitats.

Policy 36 – Mechanical Biological Treatment and Refuse Derived Fuel

Proposals for Mechanical Biological Treatment plants with or without Refuse Derived Fuel plants will other than in exceptional circumstances only be permitted where located:

i. within allocated or permitted employment land; or
ii. on land or within buildings previously used for employment/industrial type uses; or
iii. within existing landfill operations and where appropriate restricted to the life of the landfill operations; or
iv. within or adjacent to other waste management facilities; and
v. where the proposal provides for all operations including the reception, handling, processing and storage of the waste and residue to take place within an enclosed building; and
vi. to meet an identified need within Bournemouth, Dorset and Poole.

Anaerobic Digestion and Gasification and Pyrolysis

Anaerobic Digestion

6.35 Anaerobic Digestion is the breakdown of organic waste in the absence of oxygen in an enclosed container. Shredded waste materials and water are held in a container for 6 to 25 days at a constant temperature between 35-55˚C. Anaerobic digestion has been used extensively in the sewage treatment industry. It is also capable of dealing with other organic materials such as poultry litter and similar agricultural wastes and the putrescible component of household waste. The process produces methane gas which can be burnt in engines or generators and a 'digestate' (a compost like material) which may be suitable as a soil conditioner (subject to legislation) as the biodegradability of the digestate will have been significantly reduced but is more likely to be landfilled. Systems for household waste have been developed, capable of treating between 15,000 and 100,000 tonnes of organic waste per annum, although these techniques have not been tried on a commercial scale in the UK.

Gasification and Pyrolysis

6.36 Gasification and pyrolysis involve the thermal degradation of waste in the absence of air or low oxygen conditions. Gasification is the thermal breakdown of waste in the presence of air, steam or pure oxygen to produce gas, tar and ash products. Pyrolysis is thermal breakdown of waste in the absence of oxygen to produce combustible gases, oils and a char. The two technologies can be combined in an integrated plant. Energy can be recovered by using the products as fuels for motors or to generate heat and power.

6.37 Many different processes have been developed, however, to date few have progressed to commercial scale systems. Recently, suppliers have proposed the construction of several commercial scale gasification plants in the UK to deal with household waste, though as yet none is operational. The proposed plants range in capacity from 15,000 to 60,000 tonnes per annum. As currently proposed, these plants would be both physically smaller than incinerators and economic at lower inputs of waste than incinerators, but would be subject to the same legislation on emissions.

Land Use Factors

6.38 Anaerobic digestion and gasification and pyrolysis are 'industrial' processes. They are therefore best located on land allocated or already used for such processes or with other 'heavy' or waste management uses. The main potential impacts will be in relation to traffic movements and visual impact of the plant and these will be key considerations in determining any application. The traffic impact of proposals is considered in Policy 21.

6.39 The buildings for receiving, handling and processing of the waste and residues would be of an industrial appearance, and treatment vessels may be visible. The Planning Authority expect all handling and processing of waste to be carried out within an enclosed building thus minimising the potential for noise, dust, odour and other nuisances. Applicants will be expected to investigate the potential for gas or energy recovery and to harness the opportunity where practicable.

Policy 37 – Anaerobic DIgestion and Gasification and Pyrolysis

Proposals for Anaerobic Digestion and Gasification and Pyrolysis plants and the associated waste reception facilities will only be permitted where they are located:

i. within allocated or permitted employment land; or
ii. on land or within buildings previously used for employment/industrial type uses; or
iii. within existing landfill operations where the potential impacts can be adequately mitigated and where appropriate will be restricted to the life of the landfill operations; or
iv. within or adjacent to other waste management facilities; and
v. where they include facilities for the recovery of waste where practicable and where all reception, handling and processing of the waste and residue will take place within an enclosed building.

Energy from Waste Incineration (Mass Burn)

6.40 Incineration involves the controlled combustion of waste producing heat that is used to generate steam and in turn electricity. Some of the electricity can be used to supply the plant and the remainder is sold off to the national grid. Surplus heat can also be used for local heating schemes. Where both heat and electricity are harnessed the process is termed Combined Heat and Power. The success of such schemes is dependent on a purpose-designed development being available to receive the heat and power.

6.41 Apart from heat, the combustion of waste produces the by-products of ash and combustion gases. About 30% by weight of the wastes is removed as ash and this needs further disposal to landfill. This is made up of grate ash from the combustion chamber and fly ash from the flue gas-cleaning systems. Grate ash is an inert material and some ferrous metals can be recovered by magnetic separation. Fly ash is produced by the cleaning processes used to remove acidic gases, heavy metals and dust from the combustion gases before they are released. Fly ash contains heavy metals and must be disposed of to a landfill site licensed to accept this material.

6.42 A major source of concern about incineration relates to pollution through flue gas emissions generally, and health effects from dioxins in particular. Dioxins are formed in trace amounts in combustion processes such as power stations, diesel engines, open fires, barbecues, cigarettes and waste incinerators. Incinerators are required to meet future emissions standards set by UK and European legislation. The emission of dioxins and a wide range of other pollutants is covered by the EU Directive, 2000/76/EC, which was adopted in December 2000. This applies to all new plants from the end of 2002 and all existing plants from the end of 2005.

6.43 Large-scale 'mass burn' plants are recognised to be 'waste hungry' and may act as a deterrent to recycling schemes. The hierarchy of waste management indicates that all opportunities for recycling should be explored before recovery of energy via incineration is considered. Proposals for large-scale plants are therefore unlikely to be acceptable.

6.44 It should be noted that the policy below specifies that a proposal would have to meet an identified need in Bournemouth, Dorset or Poole. This is because it is important that waste should not be diverted away from recycling schemes and recognises continued concerns and nation-wide opposition to this type of technology. **At present, none of the three Municipal Waste Strategies proposes Energy from Waste Incineration.**

Land Use Requirements

6.45 A large scale plant would require a total site area of about 2 - 5 hectares allowing also for a suitable stand off distance from residential and other sensitive land uses, but some smaller modular systems are available. Operations are carried out in a purpose designed and enclosed building and may also include facilities for sorting and recycling certain elements of the waste stream. There would usually be a chimney stack the height of which would depend on detailed design criteria and local conditions. Advice would be sought from the Environment Agency as the competent authority for interpreting data on potential emissions. A key consideration would include visual impact from the building and stack. Plants would typically operate for 24 hours per day, 7 days per week but, waste storage capacity would enable waste deliveries to be confined to normal working week/hours. Plants would need careful siting due to a high level of associated vehicle traffic. It is expected that facilities would need to be well located on the Primary and Strategic Road Network. Traffic issues are considered in Chapter 4. Facilities may be appropriate in industrial/employment areas, on previously used 'brown-field' land, contaminated land or alongside other existing waste management facilities.

Policy 38 – Energy from Waste by Incineration

Applications for Energy from Waste Incineration plant will not be permitted unless all the following criteria are met:

i. the proposal meets an identified need in Bournemouth, Dorset and Poole;
ii. the proposal is of a scale appropriate to Dorset's integrated waste management requirements;
iii. it would not act as a deterrent to recovery or recycling schemes and should be for the final disposal of the residues following such schemes;
iv. on the advice of the Environment Agency, any potential releases and by product would not have an unacceptable impact on the use and development of the surrounding land and the wider environment and the proposal includes adequate provision for the safe disposal of residual waste;

v. the proposal would need to comply with all other relevant policies in the plan;
vi. it is suitably located in relation to the source of waste arising within the Plan area;
vii. it is designed and landscaped so as not to cause unacceptable visual intrusion;
viii. It has an adequate access to a Primary or County Distributor Route which does not pass through significant residential or other sensitive development.

Other Technologies

6.46 As time goes by new technologies will be explored and developed. Applications for technologies not covered under the policies of this chapter will be determined against the Plan's environmental policies. Guidance will also be afforded by the policies above depending on comparability of the technologies until these planning policies are reviewed.

Chapter 7
The Final Disposal of Waste

7.1 'Landfill' is the term used for the deposit of waste in voids in the ground. In particular, it has long been used to restore land affected by past mineral working. The term 'landraising' is used to distinguish those cases where waste is deposited on the surface of the land. Generally, this technique has been used less often, and mainly in areas where suitable voids were unavailable or in short supply. Landfilling in disused mineral workings has for many years been the main method of disposal for wastes from the Bournemouth, Dorset and Poole area. However, as set out in previous chapters, changes to the policy and legislative background and the associated move towards much more sustainable waste management methods mean that we can no longer rely on landfill as the main waste disposal option, as it now falls at the bottom of the hierarchy of waste management options.

7.2 Landfill will nevertheless remain an essential waste management option because, even if the targets for the recovery and recycling of waste are achieved, large quantities of waste will still need final disposal. Some wastes, by their very nature, cannot be recycled. These include the residues from recycling and recovery processes. For example, as noted in Chapter 6, some of the technologies (e.g. MBT and Anaerobic Digestion) which reduce the biodegradability of waste, result in a product that, at present, is only suitable for landfilling. Other wastes will remain simply because of a lack of markets for the recycled products. Inert wastes can only be disposed of to landfill if there is no market for recycled product.

7.3 There are potential environmental effects associated with landfill. The Landfill Directive aims to reduce the amount of biodegradable waste going to landfill because as waste degrades it produces greenhouse gases which contribute to the process of global warming. Degrading waste also produces a liquid called leachate that has the potential to pollute groundwater. There are also potential impacts from noise, odour, litter, dust and vermin. However, these potential environmental effects can be addressed through modern waste management and operational controls such as covering the waste with inert materials to prevent odour and scavenging birds. Landfill gas can also be actively extracted and used to produce electricity.

7.4 The Supplementary Planning Guidance *'Development Guidance for Minerals and Waste Facilities'* sets out detailed advice on the information that will be needed when considering planning applications. This also gives details of some operational aspects of sites' operation such as hours of operation, vermin control measures, leachate and landfill gas monitoring and control systems, access and transport implications. The Environment Agency's license regime and Pollution Prevention Control permits deal with the detailed operational controls.

7.5 In the Plan area there are two main types of landfill: *'non-inert'* and *'inert'*. The sites will be reclassified as a result of the Landfill Directive and they will be classed as either *inert, hazardous or non hazardous*. Two sites in the Plan area - Beacon Hill, in East Dorset, and White's Pit, in Poole - were included in the Environment Agency's interim list of landfill sites to accept hazardous waste. However since 16 July 2004 these sites are no longer classified as landfills for hazardous waste, so the Plan area now contains no sites in the Hazardous category. This chapter sets out policies on landfill sites, restoration issues and the circumstances where financial bonds could be sought in order to ensure restoration takes place. The chapter also has policies specifically to address the use of inert waste materials on agricultural premises.

Landfilling of Non-Inert Waste

Arisings of Non-Inert Waste

7.6 This includes facilities for the disposal of municipal waste (which includes waste collected from households, civic amenity sites and, litter and sweepings) and the non-inert element of the industrial and commercial waste stream. It is estimated that over the Plan period arisings of non-inert waste will amount to around 11.6 million tonnes. If the targets to increase recycling and recovery of waste are met, and when the restrictions on landfilling imposed by the Landfill Directive take effect, around 5.5 million tonnes of non-inert waste will have to be recovered. This means that disposals over the plan period (including the residues from recovery processes that will need landfilling) could still be up to around 6.7 million tonnes.

7.7 In order to minimise the environmental impacts as set out in paragraph 7.3, waste needs to be covered by inert materials. Taking this into account is important because it increases the amount of void space that is required. It is estimated that this cover material will be about 10% of the volume of the non-inert waste. Therefore, allowing for this cover material, the actual need for landfill space could be up to 7.3 million cubic metres.

7.8 However, there are already four sites with planning permission that will operate for all or part of the Plan period. These are shown on Map 1. There is also another site, at Trigon Hill, with permission subject to completion of a planning obligation. Subject to the completion of the planning obligation, Trigon could be operational by 2007/8. The likely void capacity at these sites is estimated to be around 6.8 million cu.m. This results in a shortfall of around 0.5 million cu.m. This network of sites is capable of meeting the majority of the projected needs, and therefore the Plan does not propose or identify new landfill sites.

7.9 This is supported by the fact that although the Plan makes provision for annual growth (3.5%) in arisings, the current climate is one in which waste minimisation is being encouraged, increases in recycling and recovery are mandatory and reliance on landfill cannot be continued. Given this emphasis on minimisation and recovery, it is considered that the Plan should avoid the risk of over-providing for disposal facilities - as this could act as a disincentive to recycling and recovery.

7.10 Waste arisings, disposals, and the capacity at existing sites will be closely monitored. In the event that there becomes a need for a further landfill site, applications can be determined against Policy 39 below (which also applies to extensions to existing sites). There would also be scope to identify a further site (or sites) when the Plan is reviewed under the new procedures. Account will also be taken of the spatial distribution of permitted sites in considering any application.

Policy 39 – Disposal of Non-Inert Waste

Permission for disposal of non-inert waste at new or existing landfill sites will only be granted where:

i. there is an identifiable need for additional capacity over and above that provided by existing permitted sites;
ii. it would assist with the reclamation of a mineral void;
iii. there is an adequate buffer zone between the landfill area and residential and other sensitive uses;
iv. provision is made for the recovery of energy from landfill gas where practicable; and
v. the engineering measures proposed provide for the monitoring, control and long term maintenance of landfill gas and leachate systems to ensure that there are no unacceptable impacts on the use and development of the surrounding land and wider environment.

Need for facilities to cater for Inert Waste

7.11 Inert waste, for the purposes of the Plan, includes wastes classified by the Environment Agency as inert including construction and demolition wastes. It is estimated that over the Plan period more than 8.8 million tonnes of inert waste will be produced. If the Government's target which limits the waste that can go to landfill is met, 4.1 million tonnes would have to be recovered if current recycling levels are to be at least sustained - and to reflect the reduction required in industrial/commercial wastes going to landfill. The amount that could be landfilled is projected to be around 4.7 million tonnes.

7.12 There is existing permitted void capacity for inert waste which is estimated to be in the region of 1.4 million m^3, which is equivalent to about 2.1 million tonnes of inert waste. In addition, it is thought that around a million tonnes of inert waste will be used as cover material at non-inert landfill sites (as set out in paragraph 7.8). This means that the Plan needs to provide additional sites to deal with around 1.6 million tonnes of inert waste. The Adopted Minerals and Waste Local Plan identified potential void space for inert waste sufficient to accommodate 12.8 million m3 (equivalent to 19.2 million tonnes) but with the anticipated take-up over the period to end of 2006 being some 2.4 million m^3/3.6 million tonnes.

7.13 What is very apparent is that the areas allocated in the Minerals and Waste Local Plan far exceed what could feasibly be required, even looking at the period to 2016. To a large degree this reflects the introduction of the Landfill Tax from October 1996, which has had a marked effect on the level of recycling of aggregates and recovery/re-use of soils. In turn, that has significantly reduced the volumes of construction/demolition and other forms of inert wastes needing disposal.

7.14 With existing permitted void capacity and the additional projected volume of inert waste requiring disposal being fairly low, it is unlikely that sufficient inert material will be available to make a significant contribution towards restoration of the larger mineral voids. However, total restoration of some of the smaller sites or restoration of individual parts of larger sites may be possible. There is also a need to consider the proximity of sites to the source of the waste. For example, there may be permitted sites clustered together but remote from the source of wastes.

7.15 To accord with this proximity principle, the Plan strategy takes spatial distribution into account and identifies two strategically located mineral voids where no other disposal facilities are available within reasonable proximity. The two Strategic Sites identified below in Policy 40 are at Warmwell Quarry, in West Dorset, and Henbury, in East Dorset. (The previous allocations of Admiralty Quarry and Broadcroft Quarry on Portland are not carried forward into this plan, although allowance would need to be made for current permissions at Broadcroft Quarry). In considering proposals at Warmwell Quarry and Henbury, regard will also be had to the availability of fill to complete a scheme. Due to the relative lack of inert material, it is suggested that proposals are on a relatively small scale and/or alternatively divided into phases where restoration can be completed independent of other phases.

Policy 40 – Landfilling Inert Waste in selected Strategic Mineral Voids

Proposals for landfilling of inert waste at Warmwell or Henbury will be permitted where:

i. the proposal is for a 'stand alone' scheme on a portion of the site;
ii. sufficient fill will be available to ensure satisfactory completion of the restoration scheme proposed; and
iii. the application includes facilities for recovery of inert waste.

7.16 There is also a need for strategically placed sites for inert material in the west of the County (the Bridport and Beaminster area) and in North Dorset. This is because there is currently no capacity for inert waste disposal and there is a need to exert control over unauthorised operations. Policy 41 encourages the development of facilities in both these areas where applications are supported by evidence of an identified need. Such a facility would need to be of a small scale (from 20,000 tonnes per annum) and would also need to incorporate a recycling/recovery facility. Generally inert waste disposal will be preferred in existing mineral voids, but it is also essential that satisfactory restoration of the site must be capable of completion within a relatively short timescale.

Policy 41 – Landfilling Inert Waste in North and West Dorset

Permission will be granted for combined recovery and disposal facilities for inert waste provided that:

i. the facility proposed will include recycling/recovery of inert waste; and
ii. the need for recovery and disposal capacity is not already met by existing facilities in the local area.

Outside Identified Sites

7.17 Due to the relative lack of inert materials, landfilling outside these identified areas will only be permitted where capacity is not available within reasonable proximity and applicants will be expected to provide evidence that sufficient materials will be available to complete the proposed scheme within a reasonable timescale.

Policy 42 – Landfilling Inert Waste in areas not covered by Policies 40 and 41

Outside the selected strategic mineral voids in Policy 40 and north and west Dorset, landfilling with inert waste will normally only be permitted at existing mineral voids and where:

i. there is no permitted capacity available for disposal of such waste within reasonable proximity;
ii. evidence is provided that sufficient fill will be available to ensure satisfactory completion of the scheme proposed;
iii. the proposal is for a "stand alone" scheme of working or for restoration on a portion of the site; and
iv. the proposal includes facilities for recovery of inert waste where these are not already provided at the site.

Waste from Construction Projects

7.18 Large amounts of inert waste, generally in the form of excavated soils and rocks can be generated by major construction projects such as road building. Increasingly, materials are being recovered and re-used, with such opportunities forming part of the overall scheme. However, there is often still a need for arrangements to be in place for disposal of surplus spoil and wastes. It is necessary to minimise the transportation of waste over long distances and/or to avoid valuable engineered void space suitable for biodegradable wastes being unnecessarily depleted. Policy 43 identifies the limited circumstances under which the disposal of such wastes may take place on undisturbed land.

Policy 43 – Waste from Construction Projects

The disposal of inert waste on undisturbed land will only be permitted where there are no suitable mineral voids within reasonable proximity of the construction site and only when:

i. the use of on-site materials in the construction project has been maximised including where appropriate processing and recycling; and
ii. the use of the wastes within the construction site for landscaping has been maximised;
iii. adequate provision is made for the reclamation of the site where the material is deposited.

Infilling to Achieve Agricultural Improvements

7.19 Landfilling of inert waste may also be required to facilitate agricultural improvements. Some of these are permitted development under Part 6 of the General Permitted Development Order - where the development meets the criteria and conditions specified in that Order and provided that requirements relating to prior notification to the local planning authority have been fulfilled. Others, by their scale or nature, will require separate planning permission in order to be carried out lawfully. There will be a need to ensure that these are necessary to bring about genuine agricultural improvements. Policy 44 therefore allows essential, small-scale, bona fide agricultural improvements but excludes operations which are primarily for waste disposal and which should properly be considered within the other policies of this Plan.

Policy 44 – Agricultural Improvements

Applications for the construction of hardstandings, roads or tracks or the improvement of agricultural land by the deposit of inert waste from outside the agricultural unit will only be permitted where all the following criteria are met:

i. it would result in the agricultural grade of the land being significantly improved;
ii. it would involve the minimum importation of waste to meet the need;
iii. only inert waste is brought on to the land;
iv. it would not involve or detrimentally affect agricultural land of Grades 1, 2 or 3a;
v. the deposit of waste would be confined to a small area (under 2 hectares) of lower grade agricultural land within a field or holding predominantly of higher grade agricultural land;
vi. the proposal would not involve an unacceptable loss of significant landscape features or wildlife habitats including hedges, hedgerow trees, woodland, unimproved grass land water meadows, ponds, features of archaeological importance whether scheduled or not, or the culverting of watercourses; and the final landform would be appropriate to the landscape character of the area; and
vii. the land would be restored to agricultural use within a maximum of two years of commencement of operations, and be subject to an aftercare scheme.

Reclamation

Reclamation of Landfill Sites

7.20 Waste facilities can have a substantial impact on people and the environment of an area. Although landfilling can involve active operations over periods of up to 20 years or longer, these activities have a finite life and on their ultimate completion the land must be reclaimed and returned to use.

7.21 To ensure this is feasible and practical, the Waste Planning Authority needs to be satisfied that sufficient material will be available to complete the restoration proposed

and that careful consideration has been given to how long the site is likely to be active. All applications or schemes should provide details on how developments are to be phased and aim to ensure that the minimum area of land is being worked at any one time. Restoration and aftercare should also ensure that the land is returned to a standard suitable for beneficial afteruse as soon as possible and provide the means to maintain or, in some circumstances, even enhance the long term quality of the land. If there is serious doubt that satisfactory reclamation can be achieved, then planning permission for the development will not be granted. For sites which are to be restored to an agricultural, forestry or amenity use (including nature conservation), an aftercare scheme covering a period of up to five years will be required. Also for certain afteruses, five years is a relatively short management timescale. The Planning Authority would wish to see this period extended where appropriate. It is accepted that this can be done only with the agreement of the applicant on a voluntary basis.

Policy 45 – Reclamation of Landfill Sites

Applications or schemes submitted for approval under existing permissions for landfilling will be granted or approved (respectively) only where the Waste Planning Authority is satisfied that:

i. the applicant has provided an assessment of the availability and source of materials required for infilling, restoration and aftercare of the site and the time required to complete individual phases of the development and the development in its entirety;
ii. the proposals set out the phasing of operations and show that the minimum area of land is subjected to the operations concerned at any one time;
iii. proposals provide for progressive reclamation, unless it can be shown that this will adversely affect the standard of reclamation achieved; and
iv. proposals are for a beneficial after-use which is compatible with, and where possible enhances surrounding land-uses; and
v. in the case of sites which are to be reclaimed to agriculture, forestry or amenity uses the proposals include an appropriate aftercare scheme of an agreed timescale following restoration.

Bonds and Financial Guarantees for landfill operations

7.22 Although planning conditions which are complied with, and where necessary enforced, should be able to secure the restoration, aftercare and after-use of landfill sites, there may be exceptional cases where it would be reasonable for a WPA to seek a financial guarantee to cover restoration/site re-use costs through a voluntary agreement/ planning obligation. The WPA will invite applicants to supply a bond or financial guarantee prior to commencement of development to cover restoration and aftercare costs where the applicant is not contributing to an established mutual restoration funding scheme or:

- for very long term projects where progressive reclamation is not practicable and where incremental payments into a secure fund may be made as the site develops;
- where a novel approach or technique is to be used, but the WPA considers it justifiable to give permission for the development;
- where there is reliable evidence of the prospect or a substantial risk of either financial or technical failure, but these concerns are not such as to justify refusal of permission.

The Environment Agency may have responsibility for the financial provision element in waste management licensing at some sites. Where the Agency has this responsibility, depending on the purpose for the guarantee, there may be no need for the WPA to seek the financial guarantees described above.

Chapter 8
Other Wastes

8.1 This Chapter covers sewage treatment processes, special/hazardous, clinical and agricultural wastes.

Sewage Treatment Processes

8.2 Waste water and sewage is a distinct waste group. Every household and business produces waste water which requires treatment before release 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 around Lyme Regis. There are just over 90 treatment works serving the area. The introduction of the EEC Urban Waste Water Directive has led to considerable investment in coastal sewage works, so that no raw sludge is now discharged to the sea, only clear disinfected water.

8.3 The treatment of waste water in sewage treatment works results in the production of a 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 9720 tonnes per annum (2001). Wessex Water predicts that this will rise to 11,000 tonnes by 2005. This amount of dry sewage sludge equates to around 243,000 tonnes per annum of raw sewage (rising to 275,000 by 2005).

8.4 No sludge is disposed of without treatment. Treatment is normally by anaerobic digestion (or some lime treatment), and a variable level of dewatering. Wessex Water has one plant in Avonmouth near Bristol that converts sludge into a dry, nutrient rich granule. However, locally the sludge is not dried to this extent and is only partially dewatered before it is injected into agricultural land as a fertiliser/soil improver. There is pressure to apply stricter controls to land disposal, especially on land producing food for human consumption. Changes to legislation will be closely monitored to establish whether in the future provision will need to be made for alternative forms of sewage sludge treatment and disposal.

8.5 Under the General Permitted Development Order 1995 (as amended) the water companies have extensive rights to carry out development without the need to obtain planning permission. Considerable development involving large items of plant and machinery and repairs to sewers can be carried out within existing operational sites without the submission and approval of a planning application. However, new sewage treatment works and buildings will require planning permission. In some instances an Environmental Statement will be required, depending on the size, nature and location of the development proposed.

8.6 Policy 46 sets out locational guidance for sewage treatment works and other sewage related proposals. The policies on the Protection of the Environment contained in Chapter 4 will also be relevant. Should it become necessary to further treat sewage sludge before disposal to land, new facilities may be necessary. These are likely to be similar to anaerobic digestion or gasification and pyrolysis as covered in Policy 37. These facilities may also offer opportunities for the co-treatment of sewage sludge with some municipal wastes.

Policy 46 – Sewage Treatment Works

Applications for new sites, extensions or significant development to existing sites required to process waste water or sewage will be permitted where:

i. the facility will contribute to the establishment of an integrated and adequate network of sewage treatment installations and is capable of meeting the demands of the future development and population it is intended to serve;
ii. the proposed site (including in the case of pipelines, the surface or sub-surface routes) is the least environmentally damaging practicable option;
iii. in the case of sewer or waste water outfalls to rivers or coastal waters, the location, use of, and discharge from the outfall would not be significantly detrimental to the amenity of nearby residents, established recreational or tourist facilities of acknowledged importance, nature conservation interests, or fisheries;
iv. in locations where built development would normally be inappropriate on landscape or visual amenity grounds, the feasibility of subterranean options should be explored and only high quality inclusive designs will be acceptable;
v. It can be demonstrated that there will be no significant adverse impact on residential amenity from odorous air emissions.

Special, Hazardous and Clinical Wastes

8.7 Special and Hazardous waste include a range of industrial, chemical, pharmaceutical, clinical waste and certain types of agricultural wastes in solid, sludge or liquid form. This can include materials such as asbestos and chemicals, but also substances used by the householder such as paints and engine oil. In general they are wastes which require more stringent control in their handling and disposal. Some materials can be safely disposed of in a landfill site, whilst others, for example, organic solvents require treatment by specialist firms. (Some but not all of these are classed as 'Special Waste' as defined in the Environmental Protection (Special Waste) Regulations 1996. On implementation of the Hazardous Waste Directive it is likely that they will be subsumed under the term 'hazardous waste').

Clinical Waste

8.8 Clinical waste is waste consisting wholly or partly of animal or human tissue, drug or other pharmaceutical products, and similar waste arising from medical, nursing, dental and veterinary establishments. Unless treated safely it can prove dangerous to those who come into contact with it. Most healthcare risk waste is incinerated often at facilities attached to major hospitals. For example, in 2000/1 5900 tonnes of clinical waste was incinerated at Deansleigh Road in Bournemouth. This type of waste is also subject to specialist collection and transfer systems.

8.9 It is considered that the Plan Area has sufficient capacity to deal with its clinical waste arisings and makes a contribution to regional need as some waste is imported for treatment at Deansleigh Road. Therefore Policy 47 sets out that further clinical waste incinerator capacity will not be permitted unless there is an identified overriding need for the facility forming a specific element of a regional waste strategy.

Special/Hazardous Wastes

8.10 Special Wastes are substances that are hazardous or have hazardous properties. They are included on a list, and include such wastes as oils, paints and asbestos as well as acids and sludges containing chromium and lead. They are defined within The Special Waste Regulations 1996 and subsequent amendments, although changes are expected when the Hazardous Waste Directive is fully transposed into UK legislation. Dorset is a relatively small producer of such wastes. Special Wastes produced within the county are currently treated at local, specialist waste management facilities or are transported further because of capacity and commercial reasons. Policy 47 sets out the land use criteria for facilities to deal with Special/Hazardous wastes.

Policy 47 – Facilities for Clinical, Special or Hazardous Wastes

Facilities for the handling, storage, processing or disposal of Clinical, Special or Hazardous Wastes will not be permitted unless there is an identified overriding need for the facility to meet arisings in the Plan Area and that the facility would form a specific element of a Regional Waste Strategy.

Regard will be had to the location of the source of those wastes, the nature of the facility, and the location of the nearest alternative similar facilities.

Agricultural Wastes

Agricultural waste

8.11 The Environment Agency's Strategic Waste Management Assessment sets out that in 1998 agricultural premises in the South West are estimated to have produced 14.5 million tonnes of waste and by-products. This equates to nearly a quarter (23%) of the total for England and Wales. (This compares with 11 million tonnes of controlled waste including Municipal and Industrial and Commercial wastes.) The overwhelming majority of agricultural waste arising in the Plan Area is animal excrement, which has been returned to the land. The EEC Framework Directive on Waste seeks to bring some agricultural wastes under the same controls as for example municipal waste. Attention has been on the range of non-natural waste materials arising on farms. It is likely that this waste will in the future become part of the industrial & commercial or household waste streams. However, if farm disposal of this newly categorised controlled waste continues, it might be necessary to make special provision for it at a future date. Most natural (organic) materials such as slurry and manure used for agricultural benefit should not fall into the controlled waste and existing practices are likely to continue.

8.12 Certain animal wastes are classed as clinical wastes and will be subject to Policy 47. Similarly certain agricultural chemicals will fall into the bracket of special wastes and will also be determined under that policy. Where animal carcasses occur as a result of notifiable diseases they are disposed of in a number of ways, including burial on farm, in licensed sites, or by incineration. There are no incinerators suitable for large animal carcasses in the Plan Area, but such facilities exist in Somerset.

8.13 The changing situation around agricultural wastes will be closely monitored in order to assess whether specialist facilities will be needed. If so, this would be addressed in the next review of this Plan. In the mean time any proposals would be considered against the policies on the typical range of treatment plants covered in Chapter 6.

Animal By-Products Regulations

8.14 The Animal By-Products Regulations (ABPR) control the collection, transport, storage, handling, processing and use or disposal of animal by-products. The potential impact of ABPR on the Plan is in relation to composting. Material containing catering/animal waste that has gone through the composting process cannot (at the time of preparing the Plan) be used on land unless the compost has been produced in an approved composting facility that complies with ABPR 2003 as determined by the State Veterinary Service.

8.15 Use of the compost on land will also need to be of agricultural and/or ecological benefit, as determined by the Environment Agency. If applied to pastureland, the land should not be grazed for three weeks (two months in the case of pigs) after spreading, and records must be kept of the materials spread. Compost produced in an ABPR compliant facility counts towards local authority recycling targets. It will be important to monitor any changes in procedures and any implications for the level of provision to be made for non-hazardous landfill within the Plan area.

Chapter 9
Implementation, Monitoring and Review

The Implementation of the Waste Local Plan

9.1 It is essential that the Plan is capable of being implemented to ensure that the sustainable approach to waste planning translates into action on the ground. Although implementation will involve a range of bodies including the waste planning, disposal, collection and regulation authorities, the development of an integrated and sustainable waste management network relies on the determination of planning applications submitted by private individuals and organisations. It is therefore essential that waste management companies contribute to the development of the Waste Local Plan.

9.2 As Waste Planning Authorities (WPAs), Bournemouth Borough Council, Dorset County Council and the Borough of Poole will implement the Plan by determining planning applications in accordance with its policies, subject to the other parts of the development plan and other material considerations.

Monitoring

9.3 It is the duty of WPAs to ensure that all developments are carried out in accordance with planning permissions, and accordingly they carry out a programme of inspections to monitor sites. In the event that unauthorised development occurs this will be investigated and enforcement action taken as appropriate. As part of the enforcement and monitoring role the WPAs liaise with the Environment Agency and Environmental Health Officers who also have responsibilities relating to the enforcement of legislation relating to the management of waste operations. The figures provided annually by the Environment Agency on waste disposals and recycling and site information also assist with monitoring the Plan, although aspects of this information are commercially confidential and cannot be published.

Annual Monitoring Report

9.4 The WPA monitor the Plan through production of an Annual Monitoring Report which gives an overview for both minerals and waste developments and a brief status report on each site. The report reviews trends from the preceding year and monitors the Plan policies through the gathering and analysis of indictors. Current indicators include:

- Biodegradable waste to landfill and estimated take up of void capacity;
- Inert waste to landfill and estimated take up of void capacity;
- Land occupied by waste sites - proportions of land worked, restored or in aftercare, and areas unworked/undisturbed;
- Overlap of waste sites and environmental designations;
- Determination of applications for waste management facilities.

Development and Review of the Waste Local Plan

9.5 The Waste Local Plan is prepared using the best information available at the present time. Recent years have seen a consolidation of waste policy with the publication of PPG 10, PPS10 and the Waste Strategy 2000 and the Plan will have to respond to

other changes in legislation and policy. It will be especially important to monitor the effectiveness of the Waste Local Plan in facilitating the meeting of the targets set out in Waste Strategy 2000 and the Landfill Directive. The WPA will continue to monitor waste management figures and analyse the data against the assumptions made in forecasting. The WPA will work closely with the Environment Agency in collecting data and will continue to provide information to the Regional Technical Advisory Body which will help inform the preparation of a Waste Strategy for the South West.

9.6 The Waste Local Plan provides a framework up to 2016. However, once adopted, the Plan will be reviewed under the new procedures set out in the Planning and Compulsory Purchase Act 2004. The following factors will be monitored:

- Data on waste arisings, levels of recovery and disposal, including data supplied in the Environment Agency Strategic Waste Management Assessments.
- The development of Municipal Waste Strategies for Bournemouth, Dorset and Poole.
- The preparation of the South West Regional Waste Strategy by the regional planning body.
- Changes in the designation and significance of the competing land-uses and resources, for example nature conservation and recreational uses.
- Changing European, national and local legislation on planning, environmental considerations and waste.
- The effect of waste policies adopted by other local authorities.
- The availability of sites for waste management facilities.
- The impact of tax penalties on landfilling and tax incentives or credits upon the levels of recycling or incineration.
- The availability of new information regarding the different options for waste disposal and treatment.
- Changes in waste disposal, treatment, recycling and transport costs.
- The number and volume of sites for waste management and disposal with planning permission.
- The performance of operators in complying with conditions attached to planning permissions.
- Changes in public and political attitudes and perceptions, in particular regarding environmental issues.

Glossary

Aerobic Digestion
The process of the breakdown of organic wastes in the presence of oxygen - by biological action (see also 'Composting' and 'Anaerobic Digestion' for comparison)

Aftercare
An agreed programme of work designed to bring a restored site to a satisfactory standard for agriculture, amenity, nature conservation or other afteruses. Normally imposed in the form of a planning condition to run for a period of five years following initial restoration. Under the Environmental Protection Act 1990, post closure conditions relating to pollution control and monitoring are attached to waste management licences for landfill sites.

Agricultural Waste
Mixed waste (both organic and inorganic) produced on a farm

Anaerobic Digestion (AD)
The degradation of organic material by micro-organisms in anaerobic (i.e. oxygen free) conditions. The breakdown of waste is achieved by treating it in an enclosed container in the absence of air, to produce methane gas and a relatively inert end-product. Like composting, anaerobic digestion reduces the bulk of organic waste by converting it into a relatively stable solid residue (digestate) similar to compost. Unlike composting, however, AD requires an anaerobic environment for the specialised bacteria or micro-organisms to function. Considered suitable for simple organics now typically found in municipal waste waters - and also particularly suited to wet, organic wastes. AD is carried out in specialised containers allowing control of the temperature, moisture and air. The resulting digestate material usually needs to be matured aerobically by composting before use.

Animal By-Products Regulations (ABPR)
The Animal By-Products Regulations control the collection, transport, storage, handling, processing and use or disposal of animal by-products. Amongst other things, the regulations will affect the final disposal of composted waste material.

A.O.N.B.
Area of Outstanding Natural Beauty - an area designated by the Countryside Commission (Countryside Agency from 1 April 1999) under the National Parks and Access to the Countryside Act 1949 for its particularly attractive landscape and unspoilt character, which should be protected and enhanced as part of the national heritage. Within Dorset, there are two such areas: the Dorset Downs, Heath and Coast AONB (commonly referred to simply as the Dorset AONB) and parts of the Cranborne Chase and West Wiltshire Downs AONB.

Arisings (Waste Arisings)
The quantity of waste generated within a particular area or type of facility (often classified by type of waste). Statistics of waste arisings are often fraught with problems stemming from different definitions of categories of waste and types of waste, different methods of data collection and methods of reporting, lack of accurate baseline data and variations in the dates when data has been collected.

Best Practicable Environmental Option (BPEO)
This is a principle that was first proposed by the Fifth Report of the Royal Commission on Environmental Pollution (1976) where for any given waste stream the concept was defined as "the optimum combination of available methods of disposal so as to limit damage to the environment to the greatest extent achievable for a reasonable and acceptable total cost to

industry and to the public purse". In its 12th Report (1988) the Royal Commission emphasised that BPEO is "the outcome of a systematic consultative and decision making procedure which emphasises the protection of the environment across land, air and water. The BPEO procedure establishes, for a given set of objectives, the option that provides the most benefit or least damage to the environment as a whole, at acceptable cost, in the long term as well as the short term". There is no one single option that is relevant or may represent BPEO in all areas of the country or for all types of waste streams. Essentially, it requires the analysis of alternatives within a comprehensive environmental planning framework. The Term BPEO does not appear in PPS10, July 2005.

Biodegradable and Biodegradable Wastes
Materials which can be chemically broken down by naturally occurring micro-organisms into simpler compounds. In the context of this document it refers principally to wastes containing organic material which can decompose in landfill or landraising sites and give rise to landfill gas and leachate.

Biomass
Energy crops of plants (e.g. straw and agricultural residues such as corn fibre and nutshells) and trees (e.g. fast growing trees such as poplar, hazel or willow) that can be coppiced for burning to generate electricity (or heat or liquid fuels), as well as organic matter from animal wastes and wood or paper waste. Potential biogas resources are also present in the scope for exploiting landfill gas and biogas from sewage treatment, farm slurries and poultry litter. Some of these could potentially be used in conjunction with other biomass fuels.

Bioreactor
Container or system in which biological breakdown processes are promoted. The separate term 'flushing bioreactor' is sometimes applied to one of the techniques using process engineering to design and manage a landfill to speed up the completion of decomposition through the stimulation of biochemical reactions (e.g. by recirculating leachate). The process may lead to more efficient production and collection of landfill gas, so rendering sites relatively inert and stable in a shorter period of time than traditional practices allow.

'Bring' Centres and 'Bring' Systems
One of the methods of collecting recyclable household waste - where householders take bulky waste items and materials suitable for recycling to 'bulky household waste sites' or to bottle banks etc. Bring Systems involve free standing containers placed at specific locations where the public can deposit a variety of materials, from glass bottles to textiles. They vary in size from small facilities in car parks, concentrating on glass and can collection, to larger facilities on dedicated sites collecting a wider range of materials. The containers are emptied regularly and materials are passed on to an appropriate recycling facility or MRF for further sorting or are passed direct to a merchant. The Waste Collection Authorities currently operate 'bring' systems in this area for glass, cans, paper and textiles.

Calorific Value (CV)
The unit used to measure the heat value - and applied to measure the heat value from wastes. It represents the amount of releasable energy inherent in a material.

CFC's
Chlorofluorocarbons - used extensively in the 1960's and '70's in refrigeration, foam insulation, air conditioning, fire fighting equipment, aerosol sprays and degreasing. Production and supply of CFCs, a significant ozone-depleting substance, ceased within the European Union from January 1995.

Civic Amenity Site
see Household Recycling Centre

Clinical Waste
Human or animal tissue, blood or other body fluids, excretions, drugs or other pharmaceutical products, swabs, syringes, needles and other sharps, which may prove hazardous to any person coming into contact with them, and any other infectious waste arising from medical premises. A detailed definition is currently provided in the Controlled Waste Regulations 1992.

Combined Heat and Power (CHP) Schemes
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 heating scheme or to provide heating in an adjacent industrial use.

Commercial Waste
Controlled waste that is not household or industrial waste. This tends to be waste generated from premises used wholly or mainly for the purposes of trade or business. It includes waste from: offices and showrooms, hotels, clubs, courts and Government departments, Local Authorities, markets and fairs. A detailed definition is currently provided by Schedule 4 of the Controlled Waste Regulations 1992. See also table in paragraph 2.3.

Composting
Treatment method for organic wastes involving decomposition by bacteria in aerobic conditions (i.e. in the presence of air containing oxygen), to produce compost for soil conditioning. Widely used on a domestic scale for garden wastes, and increasingly utilised for larger scale waste disposal. The process can also be used as a pre-treatment for organic wastes prior to landfilling, thereby reducing the gas generation and leachate potential of the material. Composting is a biological process in which micro-organisms convert degradable organic matter into carbon dioxide and water vapour, using oxygen in the air - and leaving a bulk-reduced, stabilised residue (humus). Composting of organic waste can be carried out by householders - "home composting" - or at central facilities either outside or, more expensively, indoors in specialised plant.

Construction/Demolition Waste
Waste arising from works of construction (including improvement, repair or alteration) or demolition, including waste from work preparatory thereto - and classed as an industrial waste in the Controlled Waste Regulations 1992. See also table in paragraph 2.3.

Controlled Combustion
Controlled Combustion is a highly regulated process carried out in a tightly controlled environment.

Controlled Waste
The collective term used to refer to all those types of household, commercial, clinical and industrial waste which are the subject of controls and currently defined in detail by the Controlled Waste Regulations 1992. It includes collected litter and refuse (including beach cleanings). See also paragraph 2.3.

Difficult Wastes
A general term sometimes used to describe wastes which may require more stringent control in their handling and disposal than normal household, industrial and commercial wastes. See also "Special Wastes".

Dioxins
A family of 210 chlorinated compounds consisting of polychlorinated dibenodioxins (PCDDs) and dibenzofurans (PCDFs). 17 of the compounds are toxicologically significant. Dioxins are a by-product of any combustion process, principally formed in the 250-400°C temperature range - in the presence of carbon, oxygen, chlorine and a catalyst. They are a concern which has to be fully addressed when considering gaseous emissions from Energy from Waste (EfW) plants. Other major sources of dioxins include discharges from metal processing and treatment plant, and from coal and forest fires

Disposals
(in relation to waste) The quantities of waste actually going for final disposal within a given area (as opposed to waste arisings)

Energy Recovery and Energy from Waste (EfW)
The conversion of waste into a useable form of energy, e.g. gas or electricity. EfW includes the combustion of waste under controlled conditions in which the heat released is recovered for a beneficial purpose. Common conversion processes are waste combustion (Energy from Waste incineration/WTEI/EfW), anaerobic digestion, and energy recovery from landfill gas. The White's Pit Landfill Site at Poole has an energy recovery scheme in operation.

Environment Agency (EA)
Formed in April 1996 by bringing together the functions of the 83 former Waste Regulation Authorities, the National Rivers Authority, and Her Majesty's Inspectorate of Pollution, the Agency aims to prevent or minimise the effects of pollution of the environment and to enhance the environment as part of the Government's overall commitment to sustainable development. In its role as the waste regulation authority, it is responsible for issuing waste management licences with appropriate conditions, as well as for enforcement of conditions on licences.

Environmental Impact
The total effect, in both the long-term and short-term, of any development or project on the surrounding environment.

Floodplain
Floodplain is the natural "overspill" area where a river may rise above its banks or when high tides or stormy seas may cause flooding of low-lying coastal areas.
PPG25 defines Flood Zones as:-

- Zone 1 – Little or no risk with an annual probability of flooding from rivers and the sea of less that 0.1%.
- Zone 2 – Low to medium risk with an annual probability of flooding of 0.1 – 1.0% from rivers and 0.1 – 0.5% from the sea.
- Zone 3 – High risk with annual probability of flooding of 1.0% or greater from rivers and 0.5% or greater from the sea.

Flood Zones are based on annual probability of flooding. It is unlikely, but possible, that a flood with, for example, an annual probability of 1% will occur two years running.
Flood Zones show the flooding that will occur without the presence of flood defences.

Areas denoted in blue on the schedule inset maps show the Zone 3 floodplain.

Gasification
Providing a thermal and chemical decomposition of organic material in a controlled process. Various related techniques are being developed, usually resulting in the production of a biogas, which can be used as fuel, and an ash or glassy, inert residue. Some processes also allow recovery of metals. In gasification, the waste is heated in a low-oxygen atmosphere to generate a gas for burning in an engine or turbine.

Gate Fee
The fee, usually quoted in £s per tonne, for processing waste at a treatment and/or disposal facility.

Groundwater Source Protection Zone
These are designated zones around public waster supply abstractions and other sensitive receptors that signal there are particular risks to the groundwater source they protect. The zones are based on an estimation of the time it would take for a pollutant which enter the saturated zone of an acquifer to reach the source abstraction or discharge point.

Haul Distance
The distance over which wastes or landfill material must be transported either from the last pick-up point of the collection vehicles or from the waste transfer station to the landfill.

Heavy Metals
Heavy, dense, metallic elements present in the environment at only trace levels but which may be hazardous. These include cadmium, lead, mercury, nickel and thallium. The term is often used loosely and can also include non-metallic elements such as arsenic and boron.

Heritage Coast
Undeveloped coast designated by the Countryside Commission (which is part of the Countryside Agency from 1 April 1999) as being of outstanding scenic value and therefore in need of special protection while allowing managed public access - a non-statutory designation promoted by the Countryside Commission since 1970 and endorsed by the Department of the Environment, Transport and the Regions.

Household Recycling Centres
Sites provided by the Waste Disposal Authority under the provisions of the Environmental Protection Act 1990. Accessible to the local public, these are sites at which householders can (free of charge) dispose of bulky household waste which cannot be collected by the normal household waste collection round. Still commonly referred to as "Civic Amenity Sites", after the legislation under which they were first provided, a term which is recognised nationally.

Household Waste
Waste from domestic properties, private garages, storage premises, caravans, camp sites, houseboats, prisons and other penal institutions, public halls, residential homes, and from residential premises forming part of an educational establishment, hospitals or nursing homes. Essentially, the term 'household waste' is used to refer primarily to waste which the local authorities (Waste Collection Authorities) have a duty to collect from households, under the Environmental Protection Act 1990. It represents, nationally, some 5% of the total amount of waste produced each year. A detailed definition is currently provided by Schedule 1 of the Controlled Waste Regulations 1992. See also table in paragraph 2.3.

Hydrogeology and Hydrology
Hydrogeology is the study of the movement of water within the ground; hydrology is the equivalent study of the movement of surface water.

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 residue at landfill (although there is also some scope for re-use of ash). Essentially, any enclosed device using a controlled flame. It includes: rotary kilns, fluidised bed incinerators, liquid injection, and grate systems. Usually incorporating energy recovery in the form of electricity production and/or heat recovery and metals recovery.

Industrial Waste
Waste from maintenance and other workshops, laboratories and scientific research establishments, wastes from dredging operations and tunnelling spoil or other excavated waste; clinical waste other than from residential homes; waste from zoos, boarding kennels and other animal establishments, waste oil and solvent;, scrap metal; collected leachate and contaminated soils; tank washings; and poisonous or noxious waste from certain processes on commercial premises (including mixing or selling paints; laundering/dry cleaning, photographic processes; selling pesticides, herbicides and fungicides; and selling petrol and other similar fuels). A detailed definition is currently provided by Schedule 3 of the Controlled Waste Regulations 1992. See also table in paragraph 2.3.

Inert Wastes
Wastes which will not alter physically, chemically react or undergo biodegradation within a landfill. The term tends to be used more loosely, to cover a slightly wider range of wastes which are not putrescible.

In-vessel Composting
In-vessel composting differs from windrow composting in that the aerobic digestion is undertaken within an enclosed container, where the control systems for material degradation are fully automated. Moisture, temperature and odour can be regulated and this produces a stable compost much more quickly than outdoor windrow composting.

Integrated Pollution Prevention and Control (IPPC)
The system of Integrated Pollution Prevention and Control (IPPC) applies an integrated environmental approach to the control of certain industrial activities. Regulators (in the majority of cases the Environment Agency) must set permit conditions so as to achieve a high level of protection for the environment as a whole. The permit conditions are based on the use of "Best Available Techniques", which balances the cost to the operator against the benefits to the environment. The companies themselves bear responsibility for preventing and reducing any pollution they may cause. The requirements of the IPPC Directive (96/61/EC) are implemented through the Pollution Prevention and Control (England and Wales) Regulations 2000.

Integrated Waste Management
A strategy for the management of waste involving a range of environmentally sound processes and systems, including the promotion of waste reduction and minimisation, materials recycling, resource recovery and arrangements for final disposal of the residue. Integrated Waste Management involves recognising each step in the waste management process as part of a whole; involving all key players in the decision making process and utilising a mixture of waste management options within the locally determined sustainable waste management system. The integration of waste management facilities can be achieved by the location of different waste management facilities on one site (co-location) or close together, but in some circumstances a stand-alone facility might be justified.

Kerbside Schemes and Kerbside Collection
One of the methods of collecting recyclable household waste - involving house to house collections of separated recyclables. These often use dedicated box collections (green boxes, black boxes etc), split bins, or special sacks - where materials are either collected separately from individual households following source separation of the wastes or - less often - simultaneously with general household waste. Collected waste is then taken to a MRF (Materials Recycling Facility) for further sorting or passed direct to a merchant

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). Modern containment landfills are engineered with an impermeable liner to prevent liquids in the wastes from leaching into groundwater. Landfilled organic wastes decompose anaerobically, producing methane - which is usually vented, but which, if it is present in significant quantities, can be recovered for heat and power. White's Pit at Bearwood (in Poole) is an example locally of a landfill with energy recovery.

Landfill Gas and Landfill Gas Control
Gas generated by the breakdown of biodegradable waste under anaerobic conditions within landfill or landraising sites. The gas consists primarily of methane and carbon dioxide, with trace concentrations of other gases. It is combustible and can be explosive in certain concentrations.

Landfill Permits
A landfill permit is a term used in Directive 1993/31/EC on the Landfill of Waste and in the Landfill (England and Wales) Regulations 2002 that implement the Directive. These aim to prevent, or to reduce as far as possible, the negative environmental effects of landfill. A permit issued under the Regulations is a PPC permit (see also Integrated Pollution Prevention and Control).

Landraising
The permanent raising of land levels by depositing waste materials on the surface of the land above existing or original ground levels (as opposed to deposit of waste in voids).

Leachate and Leachate Management
Essentially, water which seeps through a landfill and, by so doing, extracts substances from the deposited waste. Physical and chemical characteristics of the leachate depend on the fill materials and the degradation processes taking place in the landfill. The term covers any aqueous solution formed by rainwater, groundwater or inherent moisture percolating through waste in landfill/landraising sites and dissolving out a range of organic and inorganic compounds. Depending on its composition, leachate may be disposed of to sewers or otherwise treated before it can be discharged to water courses.

Life Cycle Assessment and Life Cycle Analysis
A method for evaluating the materials inputs and emissions relating to the whole life of a product - from acquisition of the raw material, through manufacture, distribution, retailing, use, re-use, maintenance, recycling and waste management. Environmental impacts and costs can be taken into account. Life cycle analysis refers to the collection of data to produce an inventory; life cycle assessment refers to the evaluation of the output.

Local Nature Reserve (LNR)
LNRs are places which have wildlife or geological features that are of special interest locally and can provide opportunities for local people to learn about and enjoy their natural environment. A Local Nature Reserve (LNR) is a statutory designation under the National Parks and Access to the Countryside Act 1949, which gives the area legal protection.

Mass Burn Incineration
A system designed to process raw refuse with limited or no pre-treatment.

Materials Recycling Facility (MRF)
Sometimes also called a Materials Recovery Facility, this is a specialised plant or facility where recyclable materials are sorted, either manually or mechanically, to specifications required by the reprocessing industry. Essentially, MRFs serve to add value to mixed recyclables by a variety of methods such as sorting (by a combination of hand picking and automatic sieving,

screening and the use of magnets and electric fields to remove metals), washing, baling and bulking-up. Any residual material not suitable for processing goes on for disposal at a landfill. MRFs are usually housed in large warehouse-type buildings and need to be located so as to optimise collection and minimise transport. 'Clean' MRFs process source-separated, mixed recyclables. Locally, there is an example of such a facility at Chapel Lane, Hurn. 'Dirty' MRFs process unsorted refuse.

Mechanical Biological Treatment (MBT)
Mechanical Biological Treatment is a combination of mechanical and biological processes designed to minimise the amount of biodegradable waste that is sent to landfill sites.
(See Paragraphs 6.29-6.34)

Municipal Solid Waste (MSW)
A term used internationally which has no meaning under UK legislation but is taken to mean those wastes which are collected for treatment and disposal by a local authority. They generally comprise waste from households, bulky household waste sites (civic amenity sites), street sweepings, and local authority-collected commercial waste.

Non Fossil Fuel Obligation (NFFO)
The mechanism by which regional electricity companies (distributors) are obliged to purchase a certain proportion of their electricity from non-fossil fuel sources.

Packaging Regulations
The Producer Responsibility Obligations (Packaging Waste) Regulations 1997, designed to implement the recovery and recycling targets in the EC Directive on Packaging and Packaging Waste and to make UK waste management more sustainable. They seek to ensure a measurable increase in the level of packaging waste that goes for recycling, offering incentives to producers of packaging to reduce the amount of packaging, and encouraging the re-use of packaging by means of statutory targets on all those from main material producers through to retailers involved in the packaging chain.

PCB's
Polychlorinated biphenyls - chemical compounds whose electrical and heat transfer properties led in the past to their widespread use by industry and in electrical products for commercial and domestic use. PCB's are very resistant to chemical and biological degradation and have become widely dispersed in the environment. New use of PCBs was banned in 1986.

Precautionary Principle
This suggests that a course of action, for example, a disposal or treatment regime, should not be adopted where the environmental consequences are unknown or not well enough understood.

Producer Responsibility
This is an initiative which seeks to promote re-use and recovery. It is designed to ensure that industry assumes an increased share of the responsibility for the wastes arising from its own products. The Packaging Regulations are based upon producer responsibility

Proximity Principle
This calls for the treatment and/or disposal of waste to take place as close to its origin as practicable in order to reduce the impact and cost of transportation and to avoid what is sometimes referred to as 'waste tourism' - i.e. the practice of transporting large amounts of waste around the country or beyond in search of suitable disposal facilities. The term does not appear in PPS10, July 2005.

Putrescible Wastes
Wastes capable of being decomposed by bacterial action. The putrescible fraction is that part of household wastes which will decompose most readily.

Pyrolysis
This is the destructive distillation of waste in the absence of oxygen. Like gasification, this entails thermal and chemical decomposition of organic material in a controlled process. In pyrolysis, the waste is heated to a high temperature in the absence of oxygen, to produce a secondary fuel product. Various related techniques are being developed, usually resulting in the production of a biogas, which can be used as fuel, and an ash or glassy, inert residue. Some processes also allow recovery of metals.

Ramsar Site
A wetlands Site of Special Scientific Interest which is designated by the Secretary of State for the Environment under the Ramsar Convention as being of international importance, especially as a waterfowl habitat.

Recycling
Recycling, in strict terms, is the processing or physical alteration of waste to extract raw materials from which new products can be made. It includes any process which takes material from the waste 'stream' and produces a usable raw material from it. By maximising the value extracted from virgin materials, and extending their life, it reduces the demand for virgin materials.

Recycling Credits
Payments made by local authorities in respect to household waste which is recycled, in accordance with the Environmental Protection Act 1990. Normally, the term refers to payments from the Waste Disposal Authority to Waste Collection Authorities and third party groups within its area - where the payments represents the avoided disposal cost for the tonnage of material recycled.

Reduction
Term used to refer to the means employed to decrease the amounts of waste produced in the initial manufacturing process or that disposed of by the consumer. As a general rule, this is often the most difficult part of the so-called Waste Hierarchy.

Refuse Derived Fuel (RDF)
A fuel product recovered from the combustible fraction of household waste. The combustible residue can be shredded to form a coarse floc (cRDF) or compressed into pellets (known as densified refuse derived fuel or dRDF).

Refuse Derived Fuel Plant
A Refuse Derived Fuel Plant converts the RDF to electricity and/or heat through a combustion or other thermal process. RDF plants may be incorporated within MBT plants or the RDF may be used elsewhere (for example in power stations).

Regional Self-Sufficiency
Closely related to the "proximity principle", this principle suggests that each region (however widely defined) should have within its own boundaries, sufficient facilities to deal with the waste that it generates. The disposal of special or hazardous wastes presents very particular problems and requires treatment at specialist plants that may lie outside a narrowly defined region.

Regionally Important Geological Site (RIGS)
RIGS are Regionally Important Geological or Geomorphologcal Sites – a site notified to the Local Planning Authority by the Dorset RIGS group as being of County Geological Interest with educational potential. There is no statutory basis for such protection. This can however be sought through planning policy.

Re-Use
Linked to waste minimisation, this is the re-use of an item WITHOUT altering its physical or chemical composition. It encompasses the re-use of materials and products. Certain products (such as doorstep milk bottles and transit pallets) are designed with this purpose in mind, but it also extends to finding new uses that bear no relation to the original purpose.

Settlement
As applied to landfill and landraising, the amount by which a landfill surface sinks below its original level due to its compaction by its own weight, and to degradation of the waste.

Site Licences
This is a colloquial name for the "Waste Disposal Licences" which were formerly issued by the Waste Regulation Authority under the provisions of the Control of Pollution Act 1974. They have been replaced by Waste Management Licences, issued under the provisions of the Environmental Protection Act 1990.

Site of Nature Conservation Interest (SNCI)
A site selected by the Dorset SNCI Panel and notified to the Local Planning Authority as being of County wildlife interest.

Site of Special Scientific Interest (S.S.S.I.)
A national series of wildlife sites notified under section 28 of the Wildlife and Countryside Act 1981 as being a Site of Special Scientific Interest on account of their flora, fauna, geological or physiographic features. Development in or near any SSSI must be very strictly controlled.

Special Area of Conservation (S.A.C.)
A Site of Special Scientific Interest additionally put forward as a Special Area of Conservation - areas of European importance for threatened habitats and/or species, under the 1992 EEC Habitats and Species Directive. The Government has submitted a list of possible sites ("candidate sites") to the European Commission. For the purposes of development, proposed SPA's and SAC's - once they have been forwarded to the Commission - are to be treated as if they have been designated.

Special Protection Area (S.P.A.)
A Site of Special Scientific Interest additionally scheduled as a Special Protection Area because of the need to protect threatened birds, their eggs, nests and habitat - areas of European importance for threatened bird species. Designated under EEC Directive 79/409 on the Conservation of Wild Birds (the 'Birds Directive'). For the purposes of development, proposed SPA's and SAC's - once they have been forwarded to the European Commission - are to be treated as if they have been designated.

Special Waste
Waste substances that are hazardous or have hazardous properties as defined in the Special Waste Regulations 1996, and subsequent amendments to these regulations. See also table in paragraph 2.3.

Stabilisation
As applied to landfill, this term includes the degradation of organic matter to stable products, and the settlement of the fill to its rest level. The process can take many years to complete.

Subsidence
The sinking of a landfill surface due to consolidation and filling of the underground void space.

Thermochemical Conversion
Direct incineration with energy recovery; or processing to produce Refuse Derived Fuel (RDF); or pyrolysis/gasification to produce gases, oils and chars which can be used as fuel

Trade Waste
In colloquial terms, means non-household waste arising from commercial operations, either collected by the Waste Collection Authorities or taken unlawfully to a bulky household waste site by a trader.

Unitary Authorities
Single-tier local authorities which have responsibilities equivalent to those of the County Councils and District/Borough Councils combined in non-unitary areas.

Void Space
The capacity within a landfill available for waste, together with cover, construction material, capping engineering and restoration layers

Waste
The definition of 'waste' in English law (s.75 of the Environmental Protection Act 1990) is "(a) any substance which constitutes a scrap material or other unwanted surplus substance arising from the application of any process; and (b) any substance or article which requires to be disposed of as being broken, worn out, contaminated or otherwise spoiled. Any thing which is discarded or otherwise dealt with as if it were waste shall be presumed to be waste unless the contrary is proved".

Waste Collection Authorities (WCAs)
Under Part 2 of the Environmental Protection Act 1990 relating to waste collection, disposal and regulation. WCAs are responsible for collection of household waste within their area and of commercial waste when asked to do so by commercial undertakings. They are responsible for street sweeping, as principal litter authorities, and have the responsibility to plan for the recycling of household and commercial wastes. Household waste collected by WCAs includes street sweeping and beach cleaning waste. Within the Plan area, there are presently eight Waste Collection Authorities: Bournemouth, Poole, Christchurch, East Dorset, West Dorset, Purbeck, Weymouth and Portland, and North Dorset.

Waste Disposal Authorities (WDAs)
WDAs are responsible for the safe management of household and some commercial wastes arising in their area. They are Unitary or County Councils - in the Plan area, these are Dorset County Council and the two Unitary Authorities of Poole and Bournemouth. WDAs are required to make arrangements for the disposal of household and commercial waste (controlled waste) collected by the WCAs. They also have to provide sites where members of the public can take and deposit their household waste which is unsuitable for collection by the WCAs (Bulky Household Waste Sites). The Environmental Protection Act introduced a framework for compulsory competitive tendering for waste disposal.

Waste Management Centre
A Waste Management Centre is 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 Management Licence and Waste Management Licensing
A licence issued by the Waste Regulation Authority under the provision of the Environmental Protection Act 1990, to control the operation and post-operational monitoring and management of waste disposal sites and facilities. They can be used to authorise the treatment, keeping or disposal of controlled waste (including mobile plant). These superseded Waste Disposal Licences.

Waste Minimisation
The term often used to refer to the reduction of waste at source, i.e. producing less waste in the first place.

Waste Planning Authority (WPAs)
Defined in Planning Policy Statement 10, 'Planning for Sustainable Waste Management' which explains: "The term waste planning authority applies to the local authorities with responsibility for land-use planning control for waste management." Since 1 April 1997, the Waste Planning Authorities in the Plan area are Dorset County Council, the Borough of Poole and Bournemouth Borough Council. It is the responsibility of the WPAs to ensure that there is an adequate planning framework to facilitate the establishment by the waste management industry of appropriate waste management facilities, and to balance this provision with the need to protect the environment. As well as having duties to prepare Development Frameworks, the WPAs have to determine planning applications for any waste facility in their area.

Waste Regulation Authority
see Environment Agency

Waste Transfer Station
A facility at which locally collected wastes are transferred from smaller receptacles into larger ones (usually onto a bulk transporter, sometimes after compacting or baling) for disposal/treatment at a remote site. The process may or may not involve the recovery of waste materials.

White Goods
A general term which has evolved and is used to describe discarded equipment and domestic appliances, usually made from sheet steel. Typical examples of 'white goods' include refrigerators, freezers, cookers and washing machines.

Windrow Composting
Windrow composting is the aerobic decomposition of shredded and mixed organic waste using open linear heaps known as 'windrows', which are approximately three metres high and four to six metres across the base. The process involves mechanical turning of the waste until the desired temperature and residence times are achieved to enable effective degradation. This results in a bulk-reduced, stabilised residue known as compost. Windrow composting can take place outdoors or within a large building. The process takes around three months.

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