

Bedford Borough, Central Bedfordshire
and Luton Borough Councils

Minerals and Waste Core Strategy

Plan for Submission

November 2011



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1 Introduction

1.1 In 2004 the Government made changes to the planning system through the Planning and Compulsory Purchase Act. This Act introduced Local Development Frameworks, which are the portfolio of local development documents that set out the spatial planning policies for the area of a local planning authority (or in this case, three local planning authorities(LPAs), in respect of minerals and waste developments). The project plan for this work, including a timetable, is set out in the Minerals and Waste Local Development Scheme.

1.2 The Minerals and Waste Local Development Framework for Bedford Borough, Central Bedfordshire and Luton Borough Councils will comprise:

- the Minerals and Waste Core Strategy, intended to be adopted in 2013
- a General and Environmental Policies Development Plan Document (DPD), intended to be adopted in 2015/16
- a Statement of Community Involvement, adopted in 2006
- the Supplementary Planning Document on Managing Waste in New Developments, adopted in 2006
- a Proposals Map

Bedford Borough, Central Bedfordshire and Luton Borough Councils Minerals and Waste Core Strategy.

1.3 Every local planning authority is required to produce a Core Strategy which includes:

- An overall vision which sets out how the area should develop, as well as a separate Vision for minerals and waste.
- Strategic objectives for the area setting out how the Core Strategy will implement the Vision, focusing on key issues.
- A delivery strategy for achieving these objectives expressed in the two Key Diagrams.
- Clear arrangements for managing and monitoring the delivery of the strategy.
- Core Policies for the provision of sufficient minerals, waste disposal and recovery capacity, for the period from 2013 to 2028;
- Identification of strategic sites for both mineral extraction and waste management.

1.4 In this case, the three Councils are unitary authorities, which means that they are all responsible for the planning control of both minerals and waste management developments within their administrative area. This Core Strategy is a joint planning policy document which provides strategic policy coverage for minerals and waste management developments proposed within the local authority areas of Bedford Borough, Central Bedfordshire, and Luton (the three Councils).

1.5 For ease of reference 'The Minerals and Waste Core Strategy for Bedford Borough, Central Bedfordshire and Luton Borough Councils' will be referred to throughout this document as 'The Core Strategy'.

Background

1.6 The Core Strategy has been developed from several preceding consultation documents:

- Minerals Development Plans Issues and Options Consultation Paper (Consultation February- March 2006)
- Minerals Core Strategy Preferred Options (Consultation September-October 2007);
- Minerals Site Allocations Preferred Options (Consultation September- October 2007),
- Minerals Site MD50 Land at Clipstone Brook (Consultation 2008)

- Waste Issues and Options Core Strategy (Consultation October- November 2007)
- Waste Core Strategy Preferred Options (Consultation June-July 2010),
- Minerals Safeguarding Areas: Consultation Document (Consultation February- April 2011)

1.7 This Plan represents the final stage in the preparation of the Core Strategy prior to it being submitted to the Secretary of State: The purpose of the consultation at this stage is to assess whether the Core Strategy is sound based on the three tests of soundness, namely that it is:

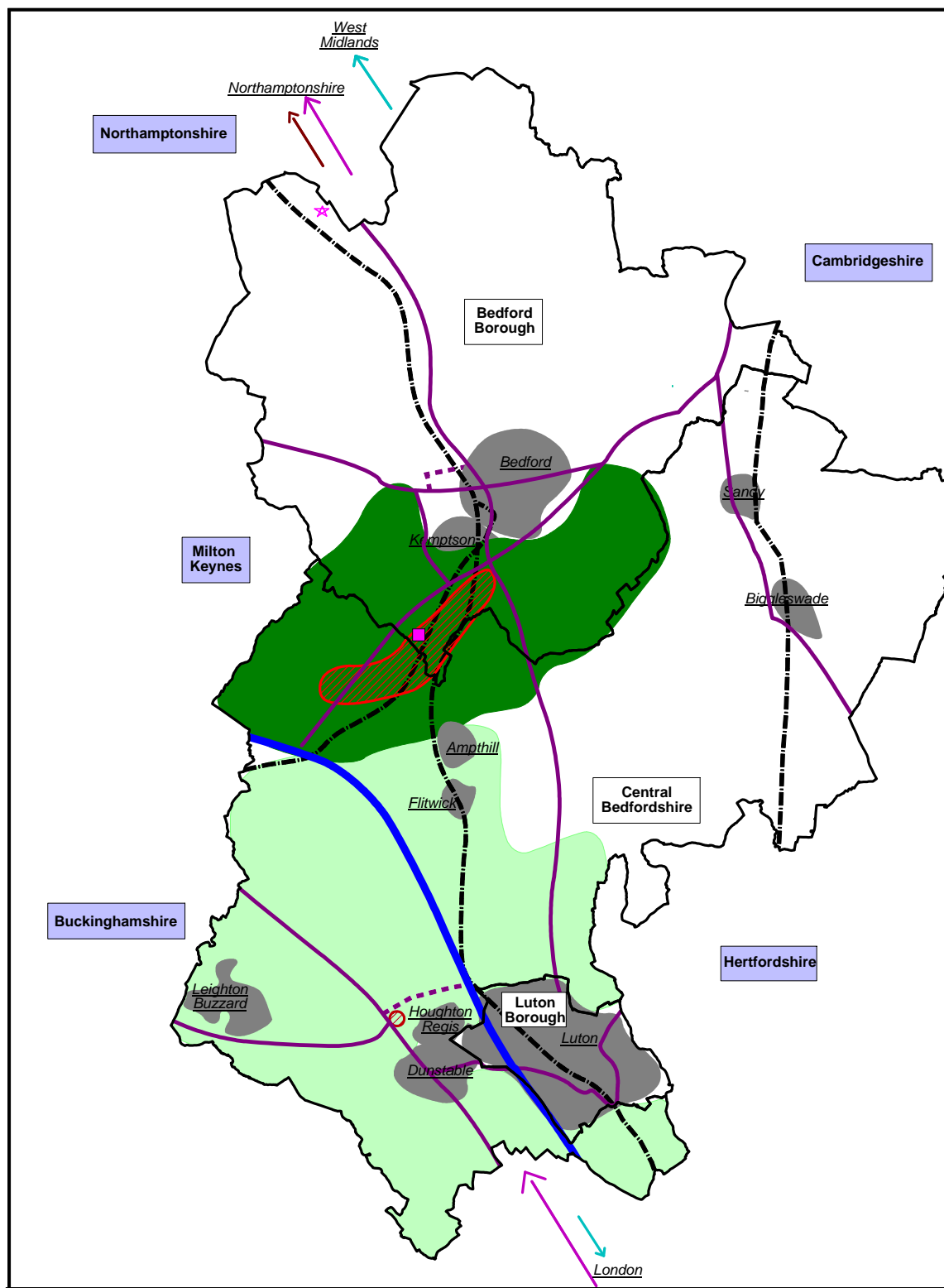
- Justified,
- Effective and
- Consistent with National Policy,

1.8 this will be considered by the appointed inspector at the Examination in Public. A consultation on this document will be undertaken for a minimum period of 6 weeks in December 2011/January 2012. A definition of Soundness will be provided with hard copies deposited, and online versions in order to assist the public. After the end of the statutory publicity period, any representations received on issues of soundness will be reviewed and any changes found necessary made, before it is submitted to the Secretary of State.

1.9 The Core Strategy is accompanied by Technical Evidence Papers (which interpret and summarise purely factual information, and provide the key assumptions in the Core Strategy); as well as an Evidence Base of factual information; and a Sustainability Appraisal.

1.10 When adopted, the Core Strategy will replace some of the Policies (as explained in the next paragraph) set out in the Minerals and Waste chapters of the Bedfordshire and Luton Minerals and Waste Local Plan, adopted in 2005. However, until the Core Strategy is adopted, all of the Saved Policies from the Bedfordshire Minerals and Waste Local Plan remain part of the statutory development plan.

1.11 One important element of the Policies from the Bedfordshire and Luton Minerals and Waste Local Plan 2005 that were saved by Direction from the Secretary of State, are the General and Environmental Policies DPD. These are not replaced by the Core Policies in this DPD, since the intention is to develop a separate General and Environmental Policies DPD, which will revisit the issues of the subject of the Saved Policies. The Saved Policies will be particularly important, as they will be used in the determination of planning applications for mineral extraction and waste management facilities. The Core Policies in the Minerals and Waste Core Strategy should not be read in isolation therefore, since any development proposal for either a mineral extraction or waste management use will be determined by reference to both the Core Policies from the Minerals and Waste Core Strategy; as well as the Saved Policies from the General and Environment Policies chapter of the Minerals and Waste Local Plan.







Waste Key Diagram





	<p>Scale 1:250000</p>	<p>© Crown Copyright and database right. 2011 Ordnance Survey 100049029. Central Bedfordshire Council. Cities Revealed aerial photography copyright The GeoInformation Group, 2010</p>	
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Legend for the Waste Key diagram




Administrative information

-  Urban areas
-  Adjacent Planning Authority
-  Unitary Authority within the Plan area
-  Unitary Authority Boundary




Transport routes

-  Primary Freight Route (non-motorway)
-  Primary Freight Route (non-motorway- not yet built)
-  Primary Freight Route (motorway)
-  Railway line



Movement of Waste (Import/Export)

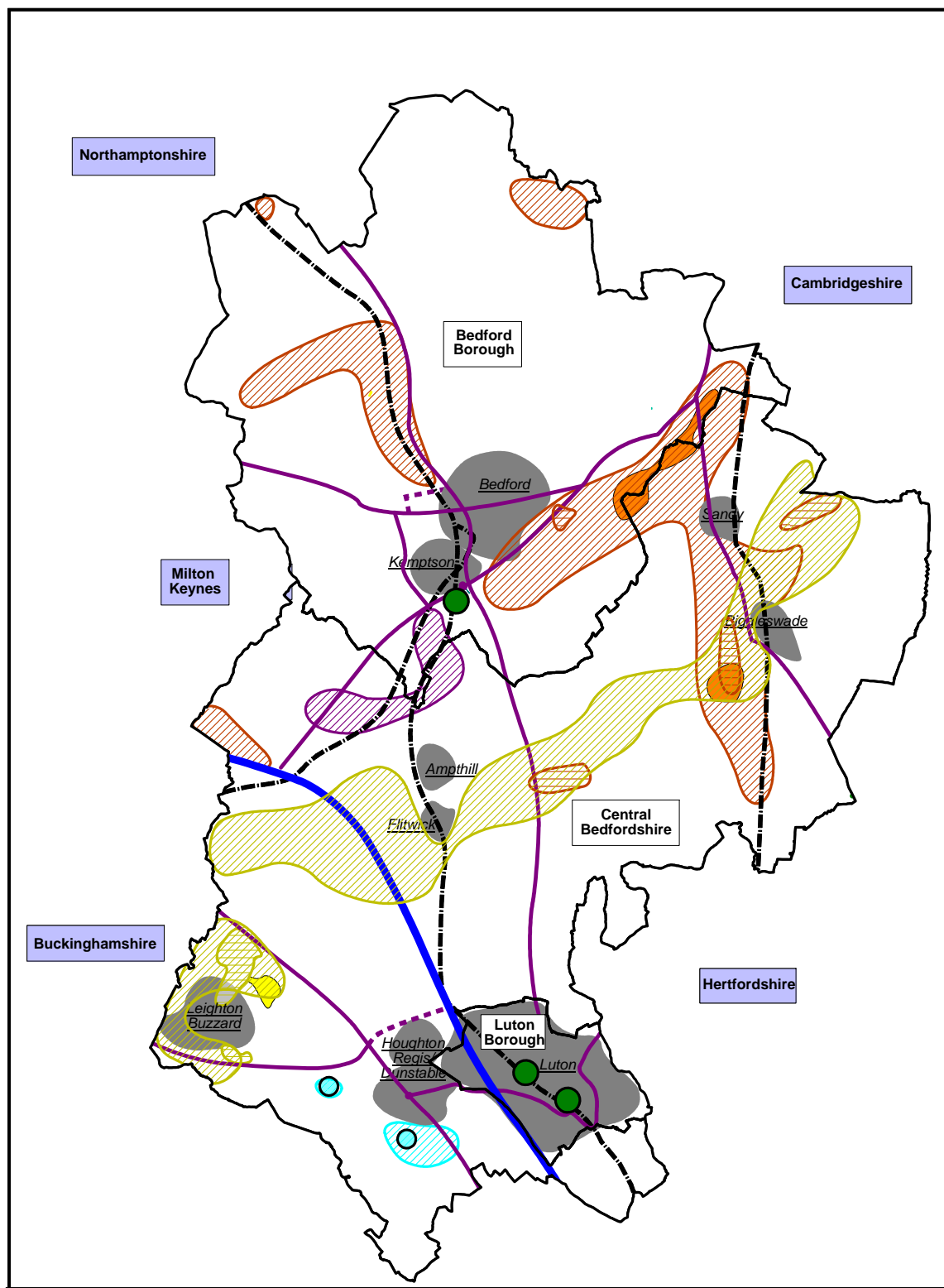
-  Clinical Waste
-  Non-Hazardous Waste
-  Very Low Level Radioactive Waste

Waste Facilities

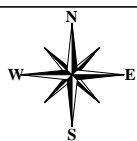
-  Non-Hazardous Landfill
-  Energy from Waste
-  General location of Strategic Waste Sites

Designations

-  Green Belt
-  The Forest of Marston Vale



Minerals Key Diagram






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Legend for the Minerals Key diagram

Administrative information

-  Urban areas
-  Adjacent Planning Authority
-  Unitary Authority within the Plan area
- Unitary Authority Boundary

Transport routes



- Primary Freight Route (non-motorway)
- Primary Freight Route (non-motorway- not yet built)
- Primary Freight Route (motorway)
- Railway line

-  Aggregate Rail depot




Mineral Safeguarding Areas (MSA)

-  River Valley/Glacial Sand and Gravel MSA
-  Woburn Sands MSA
-  Oxford Clay MSA
-  Chalk Group MSA

Strategic Mineral Sites

-  Sand and Gravel
-  Specialist (Silica) Sand

Location of permitted mineral sites

-  Chalk
-  Aggregate Sand and Gravel
-  Specialist (Silica) sand

2 Plan area and Policy Context

Geography

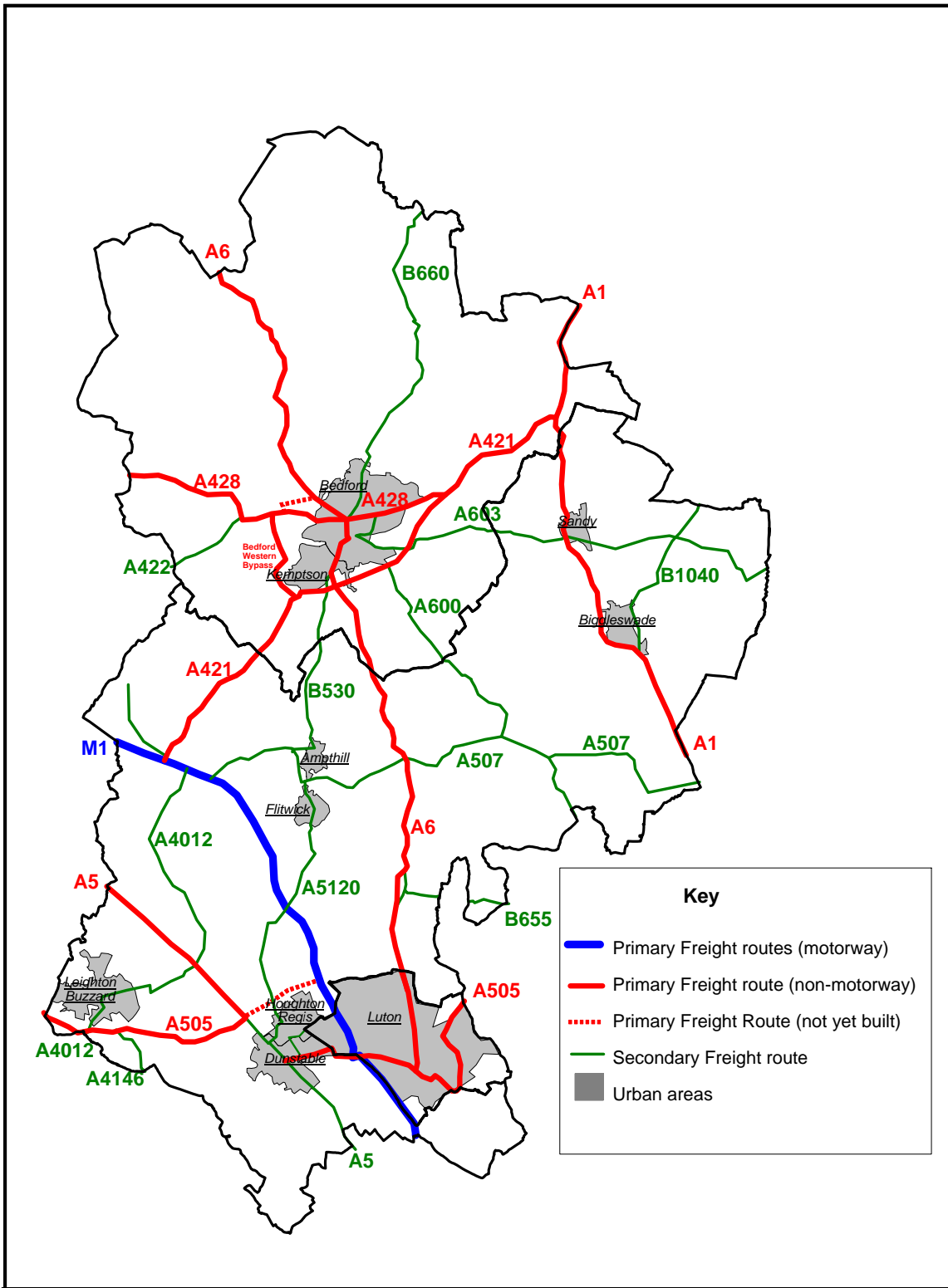
2.1 The Plan area consists of 1,235 square kilometres of land. Its administration is divided into three unitary authorities - Bedford Borough Council, Central Bedfordshire Council, and Luton Borough Council. The population of the Plan area was approximately 610,000 people in 2010. This is spread between the two major urban centres, Bedford in the north, and Luton / Dunstable to the south, together with about 40% living in smaller towns and villages in the rural hinterlands.

Strategic and Local Transport Network

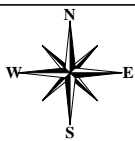
2.2 The Plan area is well connected by road and rail, with the M1 and A1 highways running north-south; and the Midland, East Coast and West Coast mainline railways providing rapid transit to/from London, the Midlands, and beyond. East-west travel is more limited, with the A421 providing the sole major route from Milton Keynes to the west, to Cambridge to the east. Other major freight roads include the A428, A603 and A5. Luton Airport provides domestic and international (short haul) travel.

2.3 Each of the three Councils is progressing its own Local Transport Plan (LTP), which includes Freight Policies and/or Strategy, and minerals and waste are substantial elements of the freight carried within the Plan area. The LTPs set out strategic transport routes and alternatives to the use of the car and are an important consideration when determining development proposals including minerals and waste management applications.

2.4 In addition, roadstone is transported from quarries outside of the plan area by rail to three rail served aggregates depots at Legrave Road and Crescent Road, Luton and at Elstow, near Bedford avoiding the use of the local road network.



Primary and Secondary Freight Network



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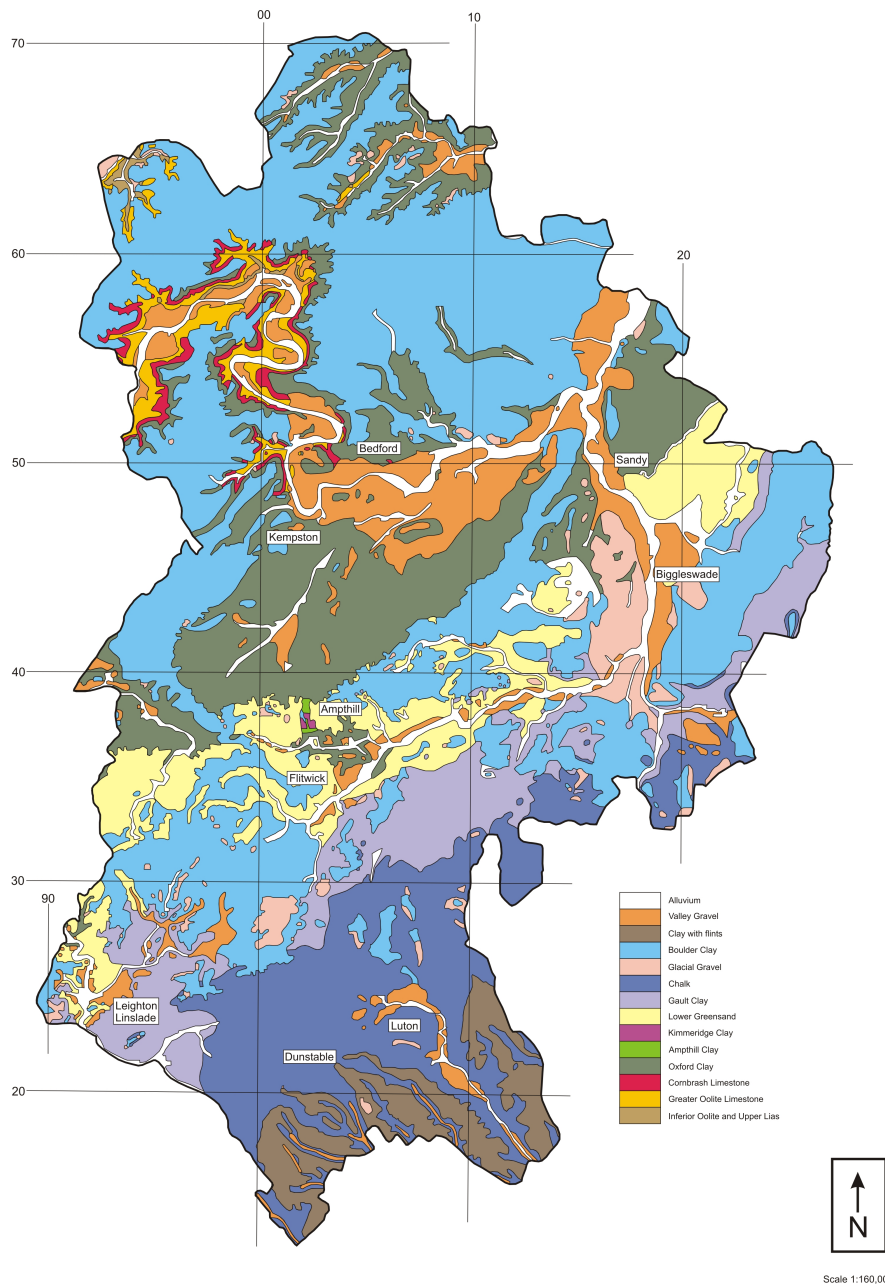


Geology and Landscape

2.5 Away from the two urban areas the Plan area is largely rural in character, with extensive agricultural land. The landscape is varied, reflecting the underlying geology. In the north, to the immediate south of Bedford, the Oxford clay belt gives rise to a low-level gently undulating topography, punctuated by the Ouse River valley which flows from the north west to the east. The central part of the Plan area is marked by the escarpment of the Greensand Ridge, which is largely wooded, and provides considerable local amenity value. To the south, the land rises under the influence of chalk formations to create the Chilterns Area of Outstanding Natural Beauty which continues south westwards into Buckinghamshire.

2.6 The underlying geology also yields the economic minerals which are the subject of this Core Strategy. In terms of tonnage, the major resources are aggregate sand and gravel, and chalk. Aggregate sand and gravel is located in the river valleys of the Ivel and Ouse and in glacial deposits west of Biggleswade. The Greensand Ridge yields a range of medium to fine grained sands, which are of very high silica purity in the vicinity of Leighton Buzzard, and have been worked extensively for industrial purposes. Further north, the Oxford Clay has historically been a major brick-making resource, but that use has now ceased. Chalk is extracted from a large scale quarry near Dunstable, from where it is transported via a slurry pipeline to cement works in Rugby; and at Totternhoe quarry for building stone.

The Geology of the Plan area



Land Use Planning Designations and Environmental Enhancement Areas

2.7 There are two major land use designations in the Plan area which are significant influences upon this Core Strategy. They are the South Bedfordshire Green Belt, and the Chilterns Area of Outstanding Natural Beauty. These have the benefit of protection under national policy and legislation. In addition, there are the Ivel and Ouse Countryside Project Areas; the Forest of Marston Vale; the Greensand Trust Area; and the Leighton Buzzard and Heath and Reach Sandpit Strategy Area. The latter are areas intended for enhancement of their local environment.

Policy

European

2.8 There has been a considerable amount of legislation concerning waste management and minerals extraction in recent years which has originated from Directives passed by the European Union. In addition there have been several Environmental Action Plans from the EU. Key Directives on waste include the 1999 Landfill Directive, and the 2008 Waste Framework Directive.

National

2.9 Within the United Kingdom, there are now three devolved administrations (the National Assembly for Wales, the Scottish Parliament, and the Northern Ireland Assembly). Each devolved administration has a Spatial Strategy, which includes mineral extraction, as well as a separate Waste Strategy. In England, a new Waste Strategy was brought forward in 2007, with minor revisions in 2009 and a review of Waste Policies in 2011.

2.10 The Government has set out its policies on planning issues in a wide ranging series of documents known as planning policy statements and planning policy guidance notes. Specific planning guidance in England exists for minerals and waste management development and currently comprises Planning Policy Statements (PPS), and Mineral Planning Statements (MPS). Of particular note is PPS10 Planning for Sustainable Waste Management, which provides planning guidance on the management of waste, while MPS1 provides overarching guidance on minerals. Guidance on the supply of aggregates in England for the period 2005 to 2020 was published in 2009 and again, at MPA level in 2011. This provides numerical forecasts concerning the level of land won aggregates that the Mineral Planning Authorities in England should provide in the mineral policies of their Local Development Frameworks.

2.11 Notwithstanding this existing policy guidance the government has indicated its intention to introduce the 'National Planning Policy Framework' (NPPF) setting out its economic, environmental and social planning policies for England to achieve sustainable development. The NPPF seeks to ensure that there is an adequate and steady supply of minerals to support sustainable growth; facilitates the sustainable use of energy minerals; seeks to ensure that proven resources are safeguarded and that prior extraction takes place, where practicable, if non mineral development is necessary in Minerals Safeguarding Areas; seeks to ensure that sufficient permitted reserves are available outside of National Parks and other protected areas, and sets out environmental criteria against which planning applications will be assessed. The NPPF does not contain specific waste planning policy as this will be published as part of the National Waste Management Plan for England. However, the NPPF is, nevertheless, a material consideration when determining planning applications for waste management development. Once the NPPF is finalised most Planning Policy Guidance and Statements (PPGs and PPSs) and Minerals Planning Guidance and Statements (MPGs and MPSs) will be cancelled.

2.12 Climate Change is addressed in the Supplement to PPS1 'Planning and Climate Change'. This sets out how planning should contribute to reducing emissions and stabilising climate change and to take into account the unavoidable consequences. Applicants for planning permission should consider how well their proposal contribute to the low carbon economy and how well adapted they are for the expected effects of climate change. This guidance will be superseded by that in the NPPF when it is adopted.

Regional

2.13 The East of England Plan (RSS), approved in 2008, sets out the regional strategy for planning and development in the East of England until 2021. This includes the adequate provision of minerals at a regional level and the adequate and sustainable provision of sites for waste management development within the

region. The RSS played a key role in providing a framework for the sustainable development of the region. The government has indicated its intention to cancel the RSS as part of the provision is in the Localism Bill but at the moment, it is still a material consideration.

Local

2.14 In addition there are Local Development Frameworks for the planning of non-minerals and waste developments for each of the three Councils. Bedford Borough adopted a Core Strategy and Rural Issues Plan in April 2008, and is developing an Allocations and Designations DPD and Gypsy and Traveller Sites DPD. A Core Strategy for the north of Central Bedfordshire was adopted in November 2009, and a Site Allocations DPD in April 2011. A Joint Core Strategy for Luton Borough Council and southern Central Bedfordshire was submitted to the Secretary of State in March 2011. However following an Exploratory Meeting the Joint Planning Committee for Luton and Central Bedfordshire agreed to withdraw the Core Strategy on the 29th July 2011. The Secretary of State confirmed that the Core Strategy should be withdrawn on 7th September 2011. However, Central Bedfordshire has endorsed the Joint Core Strategy for development management purposes, which means in determining any applications for development in the area of the Core Strategy, that it will be a material consideration.

2.15 Decisions regarding Minerals and Waste Planning will need to have regard to the policies in the Development Plan Documents for all three Local Authorities and visa versa.

2.16 Each of the three Councils has adopted a Sustainable Community Strategy, which set out long term plans for their communities. These Community Strategies must be taken into account in preparing Local Development Frameworks.

2.17 As explained in paragraphs 1.10 and 1.11 the Bedfordshire Minerals and Waste Local Plan was adopted by the former Bedfordshire County Council and Luton Borough Council in 2005. The majority of its Policies were saved by a Direction from the Secretary of State in 2008. These saved policies have considerable importance since they are the policies that will continue to be used in determining applications until they are replaced.

3 Vision

The Minerals and Waste Visions

3.1 The Minerals and Waste Core Strategy is the primary planning vehicle to deliver the supply of minerals and the facilities for the management of waste in the administrative areas of Bedford Borough, Central Bedfordshire, and Luton Borough Councils over the period to 2028. The two Visions which are set out here, for waste and for minerals, each depict an intended end state of the Plan area at the end of the Plan period and they show what the Core Strategy is seeking to achieve.

The Vision for Waste

3.2 The three Waste Planning Authorities adopting this Core Strategy are working together to enable ambitious changes to the provision of waste management facilities in their respective administrative areas. The Core Strategy will bring about substantial changes in how waste is managed, from its arising to final disposal. The most important message is that waste will mostly originate from within the Plan area, and will be managed so that a very low proportion will be landfilled, following recovery processes. This is in a period of time in which significant growth is intended around all of the towns in the Plan area.

3.3 The Plan area has been historically heavily dependent upon the disposal of non-hazardous waste to landfill, which has included substantial amounts from London. At present large amounts of commercial as well as residual municipal wastes are sent for landfilling in adjacent Counties. In recent years a wider range of recovery facilities have emerged which manage local wastes, and have assisted in diverting significant amounts from landfill. However, to move towards being a materials reusing economy a much higher capacity will be required to carry out recovery processes. This need for new waste management capacity will be met in ways that protect human health, limit the adverse impact on society, and the environment. The terms Recovery, Recycling, Reuse, and Disposal are here used in the same sense as the Waste Framework Directive 2008, and their meanings are set out in the Glossary at the end of this document.

The Vision

By 2028 the Plan area will have a sustainable materials resources economy. The Plan area will have sufficient waste management capacity for most kinds of waste arising within its area plus an apportionment of pre-treated wastes from London, but will rely upon facilities elsewhere for some specialist wastes (such as Hazardous, Clinical and Low Level Radioactive Waste).

Specifically the Plan area will maximise the reuse and recycling of wastes, and minimise the need for disposal. Consequently the amount of Municipal Solid Waste (MSW) and Commercial and Industrial waste (C&I) sent to landfill will be significantly lower than at the beginning of the Plan period. Value will be recovered through reuse, recycling and composting processes, and through the recovery of energy and/or materials from waste. Consequently the amount of MSW and C&I wastes going to landfill will be highly limited in both quantity and in biodegradable content.

Facilities for the collection and storage of waste will be fully integrated into the design of all developments, with waste management facilities located as close as possible to urban areas. Transport of most waste within the Plan area will be via the local road network, and this will influence the siting of waste management facilities.

Strategic Objectives for Waste

3.4 The Core Strategy sets out strategic objectives for waste management development which will implement and deliver the Vision. These Objectives will be translated into a Spatial Strategy and Core Policies, and be capable of measurement so as to enable monitoring.

3.5 The Waste Objectives of the Core Strategy are:

1. To promote the reduction of waste arisings

At the top of the Waste Hierarchy is Prevention, whereby society takes measures to create less wastes arisings. Many forms of developments can include measures to prevent wastes arising beyond their boundaries and creating a burden on the economy and society.

2. To manage sustainably as much waste as possible arising from within the Plan area, and take a small and diminishing apportionment of London wastes for landfilling.

The Plan area has the scope to manage the majority of its own wastes. However the Core Strategy will roll forward the commitment to landfill a small and diminishing amount of waste from London that has been subject to a high degree of pre-treatment and has had its value recovered. Some wastes will continue to be managed outside of the Plan area, including hazardous, clinical, and low level radioactive wastes.

3. To move away from dependence upon landfilling.

Landfilling is a waste of resources, and also has the potential to be harmful to the environment in a number of ways. Landfill sites can pollute aquifers, and produce gases which contribute to global warming. Within the Plan area, the scope for landfilling wastes is already very limited, due to its geology and the poor availability of suitable mineral working voids.

4. To provide greater capacity for the recovery of materials and energy

A wide range of recovery processes which produce energy and reusable materials are already arising in the Plan area. The Core Strategy will identify Strategic sites and provide Core Policies to direct where these additional waste management facilities can be located.

5. To protect and enhance the biodiversity and landscape fabric of the plan area.

The majority of waste will be managed in buildings and structures, and not in landfill sites. Nevertheless they can provide some opportunities for environmental enhancement, such as green and brown roofs and screen planting. Overall, the design and siting of such facilities should avoid or compensate for any negative environmental impacts, and will, in any event, obviate the negative impacts of the disposal of waste to landfill.

6. To protect and enhance the safety of the road network in the Plan area.

Waste management gives rise to large scale traffic movements which can strongly affect the local road network. Locations for waste management use will need to show they can accept additional traffic.

7. To protect and enhance the cultural, social, and environmental heritage of the Plan area.

Waste management sites will be generally located on existing or former industrial land, or land derelict as a result of former industrial activity or mineral working. The scope for negative impact on cultural, social or environmental heritage is limited, but large scale schemes may be able to provide enhancements to these characteristics.

8. To provide a network of facilities which are close to waste arisings, and suitable road networks so as to reduce transport issues and support the carbon agenda, appropriate to the kind of waste to be managed.

Waste management developments generate large amounts of traffic, and need to access better quality road networks. This will reduce the potential for road traffic incidents, and lead to the generation of lower levels of carbon dioxide emissions.

The Vision for Minerals

3.6 The extraction of minerals is important in a number of ways, for the local community, for the impact that it has on nearby occupiers, and the impact on the local environment. The Vision for Minerals seeks to balance these issues.

The Vision

There will be a steady and adequate supply of minerals in the Plan area sufficient to meet the needs of national and regional supply policy, and the local development needs arising from the Sustainable Communities programme. Minerals will be obtained from the most sustainable sources, and extraction sites will be planned, located and operated so as to protect the environment. Over the full life cycle of a mineral extraction operation environmental improvements will be realised, particularly in terms of biodiversity, green infrastructure, outdoor access and river basin management.

Strategic Objectives for Minerals

1. To identify appropriate reserves for aggregates and specialist (silica) sands

Reserves of minerals with planning permission are the principal means by which the supply of both aggregate sands and gravels, and specialist silica sands, are maintained.

2. To specify strategic sites for the supply of identified mineral needs, and to ensure that these sites represent the most sustainable options.

A limited number of mineral working sites are needed to ensure that sufficient minerals can be supplied throughout the period of the Plan.

3. To conserve mineral resources, by protecting them from sterilisation, encouraging their prudent use, and specifying appropriate phasing mechanisms for their release and increasing the use of secondary aggregates.

Minerals are a scarce resource which need to be protected from sterilisation by other permanent developments which would prevent them from being won at some point in the future. In addition, further reserves should only be made available for working when needed.

4. To minimise adverse environmental and amenity impacts of mineral working, and the associated transport of minerals, and to make use of opportunities to improve the environment, and make other sustainability gains.

The extraction, processing, and transport of minerals can impact detrimentally on adjacent occupiers and the environment. These impacts can be minimised by planning controls, and the reclamation of mineral working sites can lead to enhancement of the environment.

5. To ensure that host communities derive tangible benefits from any mineral working undertaken in their area.

The communities in the vicinity of mineral working sites may experience disruptions and disbenefits from their presence. However the working of minerals can also bring benefits such as employment and enhanced access provision.

6. To ensure that mineral sites, in operation and restoration, are sympathetic to their local landscape character (as determined via Landscape Character Assessment).

Any area of land worked for minerals has its own landscape character. The landscape character of the site and its fit with its surrounding area can be protected by appropriate phasing, screening, planting, and progressive restoration, such that the land area being worked for minerals at any time is reduced as far as possible.

7. To ensure the appropriate restoration and after-use of mineral workings, taking particular account of the potential to make contributions to the aims of Biodiversity Action Plans, Green Infrastructure Plans, Outdoor Access Improvement Plans, and River Basin Management Plans.

Mineral working changes the landscape in a number of ways, and provides an opportunity for enhancements in relation to wildlife habitats, public access, informal access, and the management of watercourses.

4 Strategic Waste Sites and Waste Core Policies

4.1 The Core Strategy addresses the provision of additional waste management capacity in a number of ways. Firstly, the Core Strategy identifies the amounts of waste that will arise over the Plan period, its composition, and issues concerning different categories of waste.

4.2 It is anticipated that a total of 2,100,000 tonnes of waste will require management in the Plan area in 2013/14, increasing to 2,300,000 tonnes in 2028/29 (see 'Table 1' below). This comprises Municipal (MSW), Commercial and Industrial (C&I), construction, demolition, and excavation wastes (C,D&E), as well as a small and diminishing amount of residual waste from London. Over the fifteen year Plan period of the Core Strategy, a total of 35,000,000 tonnes of waste will require management within the Plan area (of which 1,300,000 tonnes will originate in London).

Table 1 Waste to be managed at 2013/14 and 2028/29 (Tonnes)

Year	MSW	C&I	CD&E	London	Total to be managed in the Plan area
2013/14	306,000	510,000	1,140,000	165,000	2,121,000
2028/29	371,000	544,000	1,323,000	31,000	2,269,000

4.3 The amounts of recovery and landfill capacity have been calculated from these forecast amounts of waste arisings by applying targets. Secondly, the Core Strategy identifies strategic sites for the management of waste, both by recovery and disposal. Strategic sites are those which will play an essential role in providing waste management capacity needed in the Plan area. These include landfill sites for non-hazardous wastes; as well as sites for more intensive waste management recovery operations. The Core Strategy identifies land for both of these generic types of waste management facilities. Thirdly, the Core Strategy sets out Core Policies concerning waste developments which can be applied alongside the more detailed Policies which will be developed in the General and Environmental Policies DPD. These Core Policies will provide guidance in respect of specific kinds of waste developments; where waste developments should come forward; and the amount of waste management capacity to be provided.

Table 2 Additional recovery capacity for MSW and C&I wastes required at key years

Year	Additional Recovery Capacity Required (tonnes) ⁽¹⁾
2013/14	72,000
2018/19	169,000
2023/24	192,000
2028/29	219,000

1. The future recovery capacity requirement has been calculated by comparing the targets for recovery set out in Waste Core Policy WCP1 with existing operational capacity only. At the time of writing this is equivalent to 449,000 tonnes of waste. However, if those sites with permission but which have not yet commenced are added, this increases to 1,065,000 tonnes. Whilst it is likely that these permitted facilities will be developed, this cannot be guaranteed. This could create a scenario where in theory there existed sufficient permitted capacity within the Plan area, such that it could "crowd out" other facilities from coming forward, although no facilities were actually constructed and operational. Therefore only operational capacity has been utilised in these calculations. A comparison of the recovery capacity forecast to be needed using both permitted and operational capacity can be found in Waste Technical Evidence Paper 2 (Chapter 6).

Figure 4.1 Comparison of existing operational capacity with future capacity required under RSS targets.

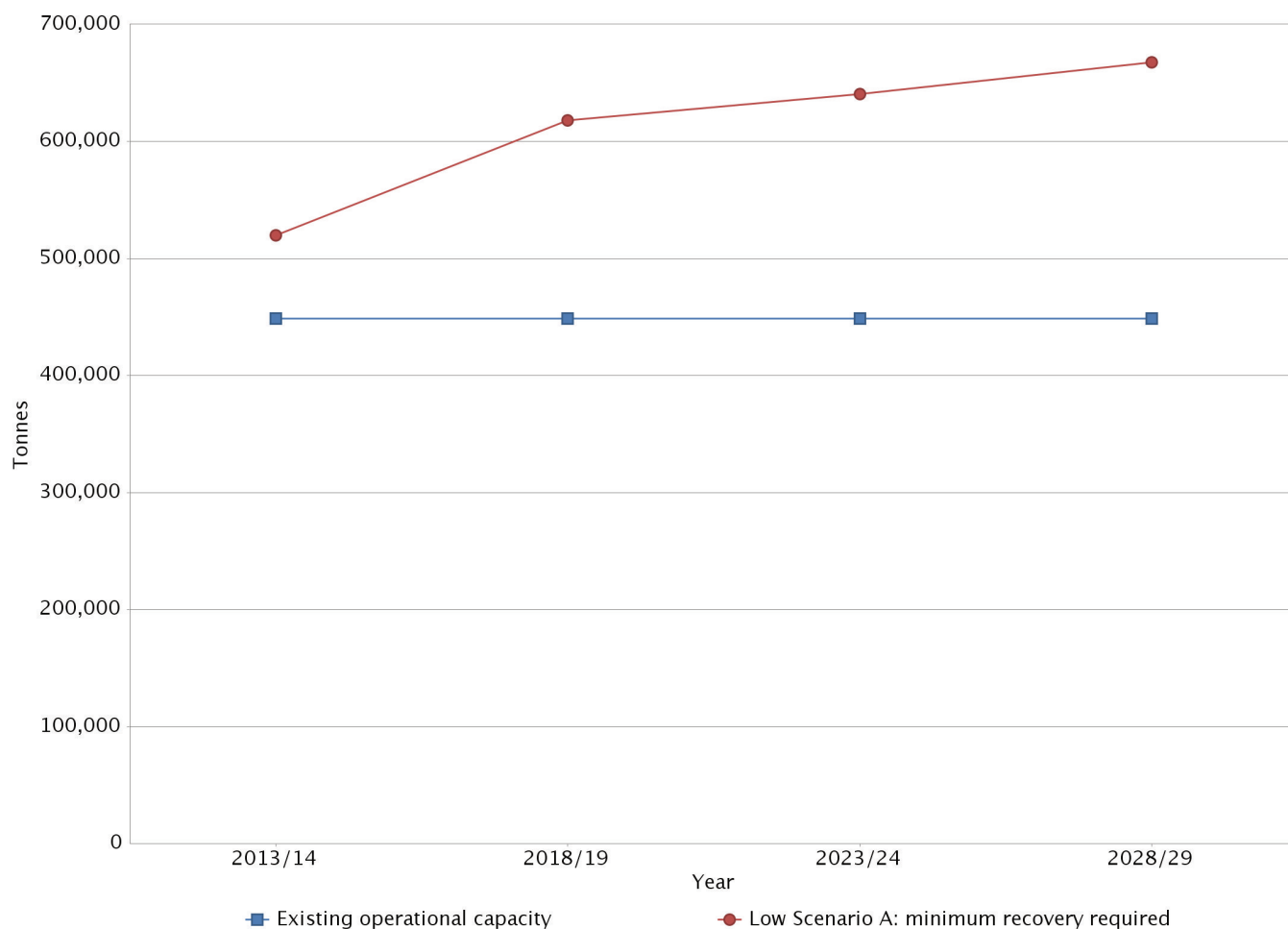
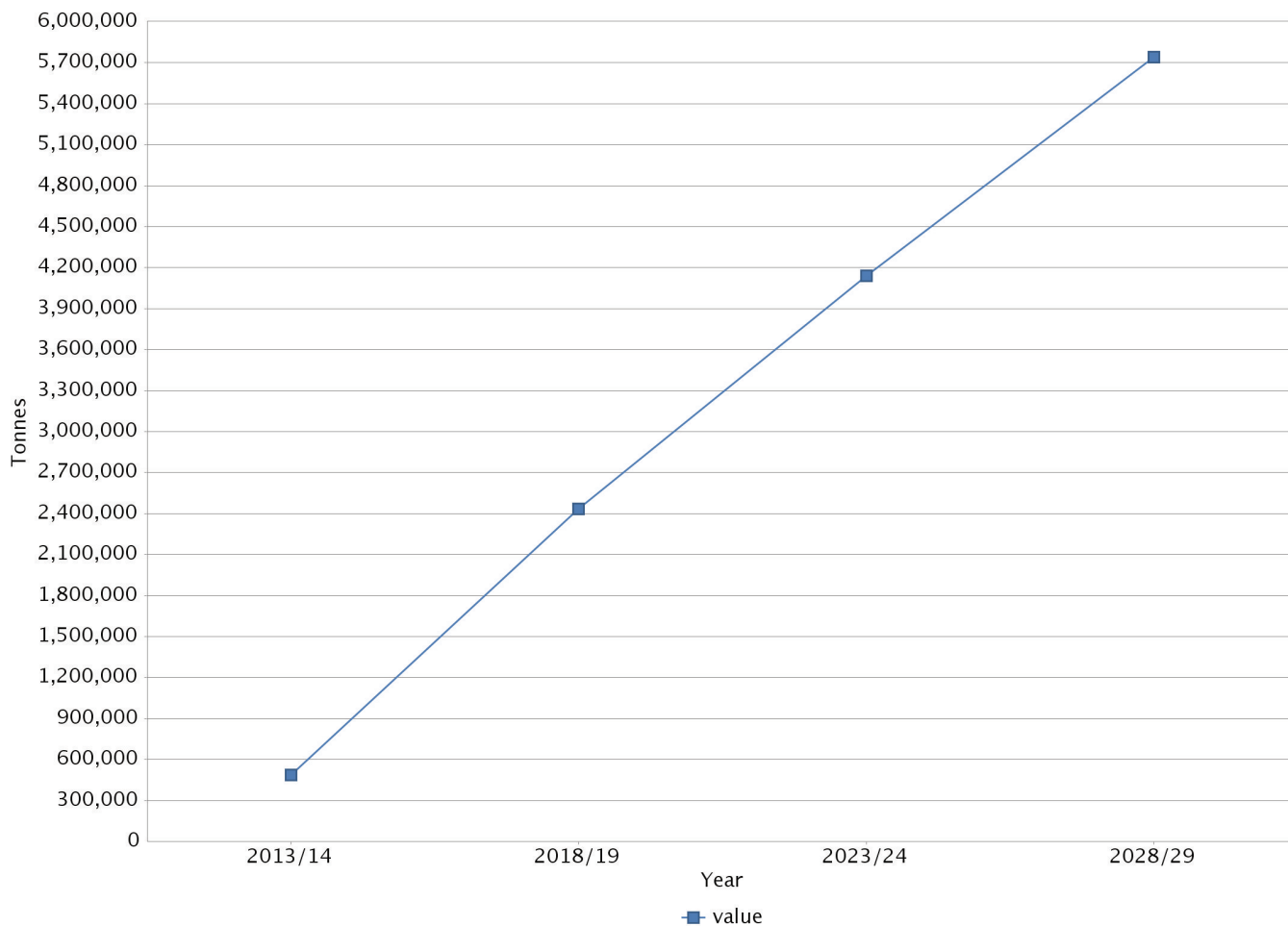


Table 3 Cumulative Non-Hazardous Landfill capacity requirements

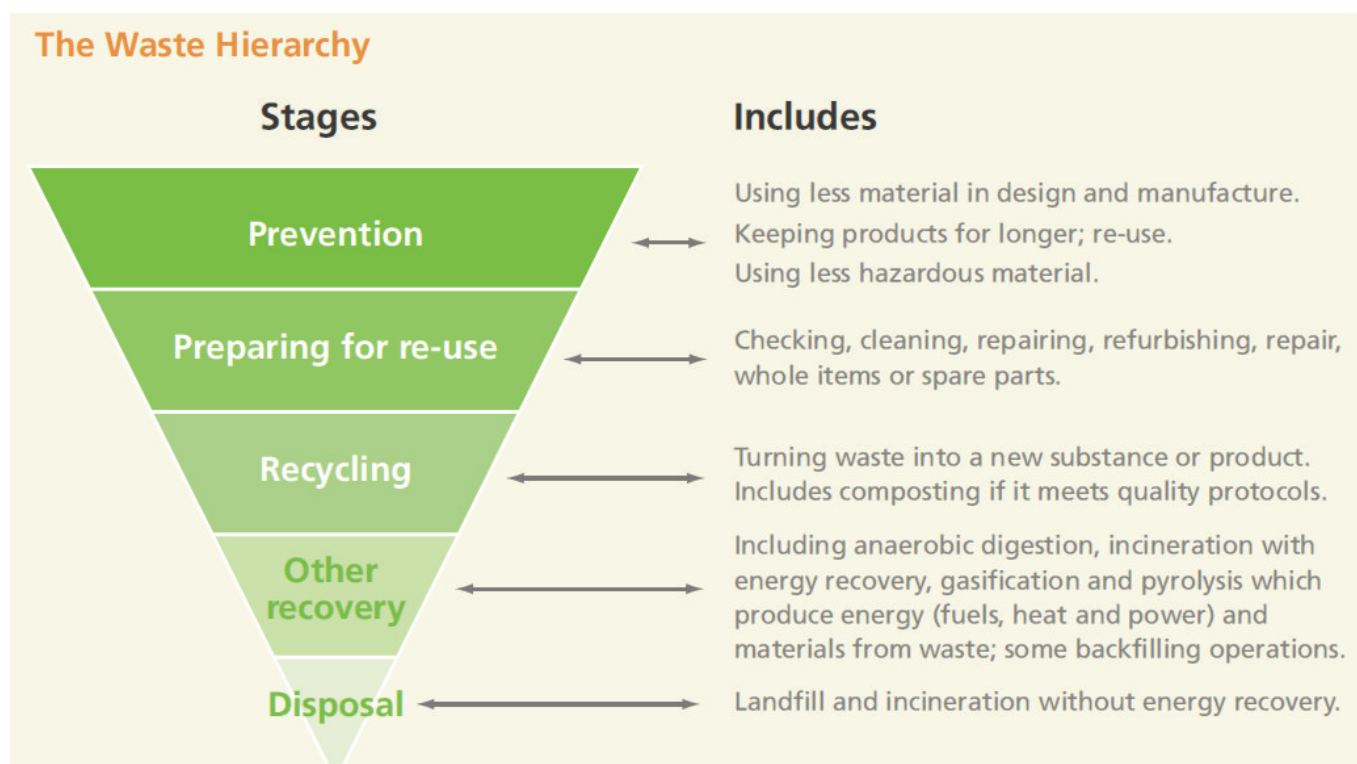
Year	Annual tonnage	Cumulative tonnage ⁽¹⁾ (Landfill Capacity Required)
2013/14	486,800	486,800
2018/19	354,645	2,435,900
2023/24	331,784	4,141,300
2028/29	311,660	5,739,300

1. The landfill capacity requirement quoted in table 2 (above) gives cumulative tonnages throughout the Plan period.

Cumulative Non-Hazardous landfill to 2028/29



4.4 The Waste Framework Directive 2008 places emphasis on the Waste Hierarchy, which sets out an order of priority for each of the broad categories of waste management, as follows:



(DEFRA, 2011)

The prevention of waste arising is not directly within the scope of planning control. A broad range of non-planning initiatives are influencing various sectors of society so as to encourage the prevention of wastes arising, and re-use many materials on site or within a development that would otherwise be discarded. Planning policy for waste facilities provides a framework to enable a range of waste management facilities to be developed, and directs where, and in what amount, such facilities should be developed. However, it cannot directly influence the production or prevention of waste.

Preparing for re-use involves facilities which check, clean, or repair materials that have become waste so that they can be re-used without any other pre-processing.

Recycling means operations by which waste materials are reprocessed into products or materials, including organic materials, and waste oils.

Other recovery operations, such as those involving energy recovery, have an order of priority above Disposal and below Recycling.

Disposal (which includes landfilling operations) is at the bottom of the Waste Hierarchy.

4.5 In order to move the economy of the plan area towards a materials reusing economy, and away from being dependent upon landfilling, the Core Strategy places emphasis upon enabling the development of additional capacity in various forms of Recovery operations. To that end the Core Strategy identifies four sites for large scale non-landfill waste management operations, and sets out Core Policies concerning locations for non-strategic waste uses. The four strategic sites for waste management operations are:

- Land at Elstow north
- Land at former Brogborough Landfill
- Land at Rookery Pit South

- Land at Thorn Turn

4.6 These four sites are allocated for strategic uses, which are waste management uses important to enable the Plan to achieve its objectives. In particular, they can accommodate large scale waste recovery uses (as defined under Annex 2 of the 2008 Directive) and will as a consequence significantly contribute to the shift towards a materials reusing economy.

4.7 The shift away from a reliance on landfilling has already begun, and this transition will continue as both local authority and business waste managers change their behaviour away from using landfill as the means of managing the majority of their wastes, to using any or all of the range of recovery processes available (which include waste handling, separation for reuse, and intensive residual treatment processes). The Core Strategy identifies sites for the large scale recovery processes, and thereby assists this shift in waste management from landfilling further up the Waste Hierarchy. The emergence of additional recovery capacity of all kinds will be monitored, as well as the materials that it manages, and its origin.

4.8 Some wastes have specialist requirements for their management, and are likely to continue to require to be managed outside of the Plan area. Hazardous waste, for example, arises especially from the redevelopment of former industrial land. This waste can normally only be managed by disposal in dedicated landfill sites, or else in separate "monocells" within a non-hazardous waste landfill site. The volumes of arisings of hazardous wastes in the Plan area are low, and no facilities for their management exist within the Plan area. It is anticipated that the transfer of these wastes to nationally significant disposal facilities outside of the Plan area, will continue.

4.9 Municipal wastes are managed by each of the three Councils under contracts (see Waste Evidence Base 6). Central Bedfordshire Council is procuring a new contract under the BEaR project, and is expected to announce a Preferred Bidder in 2012. The existing waste management contracts for Bedford Borough and Luton Borough Councils are due to expire in the early part of the Plan period, after which new contracts will then be available to the waste industry to bid for. Due to targets for the diversion of waste from landfill, and the rising cost of the Landfill Tax, new waste management contracts for municipal wastes are likely to lead to new facilities being developed in order to divert more waste from landfill, and to achieve the nationally set recycling targets. The strategic sites identified in Policy WCP2 are available to develop facilities within the Plan area for this purpose.

4.10 Commercial and Industrial waste are broadly those produced by business sectors and not collected and managed by the Local Council as Waste Disposal Authority. These wastes are often very similar in composition to Municipal Solid Wastes, and are generally managed under short term contracts by private sector waste management operators for their overall management, including recovery and disposal.

4.11 It is anticipated that a total of 816,000 tonnes of Non-Hazardous waste (i.e. Municipal Solid Wastes and Commercial and Industrial wastes) will arise within the Plan in 2013/14, rising to 915,000 tonnes at 2028/29. When London's residual Non-Hazardous waste is added, then this increases to 981,000 tonnes in 2013/14, rising to 946,000 tonnes in 2028/29.

4.12 There will continue to be a need for sites for the landfilling of non-hazardous wastes, even as recovery rates increase throughout the life of the Plan. Some wastes arising from all sectors will continue to be managed by landfilling, including the residues from recovery processes which can not be managed in any other way than by disposal. Of significance is that the remaining life of the single non-hazardous waste landfill site within the Plan area, at Stewartby, is such that there will be no non-hazardous waste landfill capacity by the end of 2011. Potential sites for the landfilling of non-hazardous wastes are former mineral working voids within the Plan area, which must be of a geology which can contain non-hazardous wastes to satisfactory pollution control standards. Such sites are extremely limited within the Plan area, since many former clay workings have already been landfilled or else restored in other ways. Both of the sites proposed as non-hazardous waste landfill sites are a result of brick clay working. These sites are

Rookery Pit South, and Elstow Pit South. In order to ensure the flexibility that the Plan needs by ensuring adequate provision of non-hazardous waste landfill space, both sites are identified in Policy WCP2. There are currently no applications to develop either of these two sites identified in Policy WCP2 as Non-Hazardous waste landfill sites. Consequently until such time that one of these sites are developed, residual waste requiring disposal to landfill will continue to be transported out of the Plan area (see Waste Evidence Base 4).

4.13 It is expected that the rate of recovery of both MSW and Commercial/Industrial wastes will exceed 70% during the majority of the Plan period. This is anticipated to amount to approximately 668,000 tonnes of Non-Hazardous waste undergoing recovery at 2028/29. Similarly the proportion of wastes landfilled will steadily decline from around 50% now, to less than 30% (approximately 332,000 tonnes at 2028/29) during the majority of the Plan period. In addition waste going to landfill will change in composition, since it will increasingly be residues from recovery processes, rather than untreated wastes.

4.14 It should be noted that Rookery Pit South has a substantial land area (107.2 hectares) as it is a large mineral void created by historic clay working. The site is capable of accommodating both non-hazardous waste landfill operations, as well as one or more recovery operations in different areas of the site. The Infrastructure Planning Commission has announced its intention to grant a Development Consent Order for the development by Covanta Energy of an energy from waste facility on land at Rookery Pit South, to the south-west of Bedford. Final approval is subject to Special Parliamentary Procedure. The Covanta facility would have a nominal throughput of 585,000 tonnes per annum of municipal, commercial, and industrial wastes, sourced from a wide area including the Plan area.

4.15 The allocation of sites that are broadly acceptable in principle that can manage either Municipal or Commercial/Industrial wastes, and that can supply substantial amounts of recovery or disposal capacity, provides certainty that the waste capacity gap identified (see Technical Evidence Paper 2) will be met. In addition, by allocating all of these sites it ensures that the Plan is flexible enough to cope with future changes in circumstances. Each of these sites are shown here in accompanying plans, and detailed land use information is set out in the Evidence Base. In addition, the site assessment information is set out in the evidence base, and the site selection methodology is set out in Waste Technical Evidence Paper 4. The strategic sites are not identified for a specific technology. Rather, this is a matter that will be dealt with at the planning application stage, taking into account their specific land use characteristics.

4.16 Specific site allocations are set out for strategic disposal and recovery sites in Waste Core Policy 2; while Waste Core Policies 6 to 16 set out criteria for the locations of a range of specific kinds of facilities. The Waste Core Policies provide a policy framework in terms of where, and in what form, waste management developments will take place during the 15 year period of the Core Strategy, and provide the planning policy framework for the creation of a network of waste management facilities in the Plan area. The Delivery Strategy at Chapter 6 addresses how to enable new waste developments to come forward in the right places, and to enable sufficient waste management capacity to be developed during the Plan period, given the emerging needs of the Plan area. It also addresses the risks and specific factors which will impinge upon the Core Strategy and its ability to meet its Objectives.

Waste Core Policy WCP1: The Provision of Recovery and Disposal Capacity

Sufficient capacity for the recovery of waste from the Plan area, and for the landfilling of wastes including pre-treated residual waste from London, will be provided in order to enable the following targets for diversion from landfill and recovery to be achieved:

- recovery of at least 50% of Municipal Solid Wastes by 2013, and 70% by 2015.
- recovery of at least 72% of Commercial and Industrial wastes by 2013, and 75% by 2015.

4.17 The targets set out in Waste Core Policy WCP1 set minimum levels of recovery (as defined in Directive 2008/98/EC, and defined in the Glossary) for both public sector and business sector wastes at the date of the adoption of the Core Strategy, and two years thereafter, and it is hoped that these targets will be exceeded in practice. The key targets expressed in this policy repeat those set out at Policy WM2 of the East of England Plan published in 2008. To enable this to happen the Core Strategy identifies strategic sites which can be developed for the recovery of municipal, commercial, and industrial wastes arising within the Plan area, as well as the disposal of non-hazardous wastes (untreated wastes and residues from recovery processes) by landfilling. Recovery takes many forms, and depends upon the type of waste involved. The former East of England Regional Assembly agreed with the Mayor of London that the region would continue to accept for disposal by landfilling a small and diminishing amount of post-treatment wastes from London, and provision is made for this in the calculations of the requirement of landfill capacity in Waste Technical Evidence Paper 2. Wastes for landfill in the Plan originating from London will be the residues from intensive residual treatment processes, and will be relatively inert. In volume terms, the amount of wastes from London to be landfilled in the Plan area will be significantly less than the historic levels, and will diminish considerably further throughout the Plan period. The amount of available capacity in the Plan area (for both Recovery and Landfill operations) will be monitored over the life of the Plan, in order that substantial shortfalls or excesses can be detected, including whether permitted facilities are implemented in practice.

Waste Core Policy WCP2: Strategic Waste Management Sites

Four sites have been identified for waste recovery uses:

- Elstow North
- Land at former Brogborough landfill
- Rookery Pit South
- Land at Thorn Turn

The following sites are identified for the landfilling of non-hazardous waste:

- Rookery Pit South
- Elstow South

4.18 The four strategic recovery sites identified in Waste Core Policy 2 are the most appropriate given the land use circumstances of the Plan area, as discussed in Chapter 2, and provide the locations where large scale recovery operations should take place. In addition, two sites are identified for the disposal of non-hazardous waste by landfilling. Waste Technical Evidence Paper 4 sets out the criteria and methods by which these sites were identified.

Waste Core Policy WCP3: The Determination of Applications for Waste Management Developments

All applications for waste management developments will be determined with regard to:

- the Waste Core Policies in this DPD, which are appropriate to the application

- the Strategic sites identified in this DPD for Landfill and/or Recovery uses
- the Saved General and Environmental Policies in the Bedfordshire and Luton Minerals and Waste Local Plan (or such other Policies as may replace them)

4.19 It is expected that there will be applications for a range of waste management facilities during the Plan period in response to the continuing demand for waste management and the rising targets for recovery of waste. This DPD is intended to assist developers seeking to bring forward new waste management proposals and guide them to appropriate locations dependent upon the type of waste management use. In determining individual planning applications for waste management uses the Councils as Waste Planning Authorities (WPAs) will be reliant upon the Waste Core Policies in this DPD. In addition, WPAs will take into account whether the development is proposed to take place on a Strategic Site. Finally the WPAs will consider the details of the application against the General and Environmental Policies which were Saved by Direction of the Secretary of State from the Bedfordshire and Luton Minerals and Waste Local Plan, or such other policies which may replace them.

Waste Core Policy WCP4: The Design and Layout of New Waste Management Facilities

New or extended waste management facilities will be designed with due regard to their scale, their setting and surrounding landscape. Innovative designs for waste management facilities which use colours and materials compatible with the locality will be encouraged, in order to promote sympathetic designs and local distinctiveness. Pre-application discussions and reference to existing policies will be encouraged.

4.20 The majority of new waste management facilities that will be developed during the Plan period will involve buildings and structures. The layout and built form of waste management developments contributes significantly to how they impact on adjacent occupiers, including their layout, screening, design of buildings, colours, and materials. It will be important that new waste management facilities shed their historic image of waste operations as bad neighbours, so that they are better accepted within the fabric of new and expanded settlements. Part of the means to achieve this greater acceptance is to improve the layout, built form, and design of new waste management facilities. 'Designing Waste Facilities: a guide to modern design of waste' was published by DEFRA in 2008. This sets out key principles for the design of waste facilities and provides additional guidance in respect to their design to ensure that it is of high standard and can be integrated into its surroundings.

4.21 Waste recycling and recovery facilities contribute to addressing climate change by diverting waste from landfill. However, the design and layout of waste management facilities and operating regimes should also take into account the potential impacts of climate change.

Waste Core Policy WCP5: Climate Change

Waste Management Development proposals, including operational practices and restoration proposals must take account of climate change for the lifetime of the development through measures to reduce greenhouse gas emissions and to adapt to future climate change.

Such measures may include:

- Quantifying the reduction in carbon dioxide and relevant greenhouse gases and ways of monitoring
- Demonstrating how the design, location and transportation related to the development will limit greenhouse gas emissions

- Setting out how the proposal will make use of renewable energy including opportunities for the generation of energy from waste for generating energy for use beyond the site itself and use of decentralised and renewable or low carbon energy based on the principles of the energy hierarchy. Proposals should adopt emissions reduction measures. Where on site options have been considered and are not viable, offset measures or allowable solutions may be put in place.

Proposals should also set out how they are resilient to climate change and may therefore include:

- Incorporation of sustainable drainage schemes to minimise flood impacts
- Measures to enhance water efficiency
- Measures to adapt to the potential impacts of excess heat and drought
- Sustainable transport measures including the use of travel plans

4.22 All waste management developments have the scope to contribute to climate change as well as to contribute to mitigating climate change. It is important that the location and operation of these facilities makes a positive contribution to the mitigation of climate change with regards the areas set out in this Policy.

Waste Core Policy WCP6: Catchment Area Restrictions

Disposal and recovery capacity will be provided for the volume of waste that will arise from within the Plan area, as well as an apportionment of post-treatment residual waste from London. In order to ensure that any facility permitted receives waste for which it is intended, developers of new strategic facilities will be subject to a legally binding agreement to restrict the origin of waste that they receive so as to ensure that any facility permitted will meet the needs of the Plan area.

4.23 Waste can travel substantial distances from its point of arising, and frequently across local authority boundaries, to sites where it can be subjected to recovery and/or disposal operations. The Core Strategy is built upon taking responsibility for the management of waste arising within the Plan area. In order to ensure that waste management capacity is used for locally arising wastes, Catchment Area Restrictions will be employed. Managing waste which originates beyond the Plan area will be very much the exception. The proportion of waste to originate from outside of the Plan area should not exceed 20% for any individual facility.

Waste Core Policy WCP7: Including waste management in new built developments

All new developments will be required to achieve a high standard in their design and the mitigation of environmental impacts including climate change. All new developments should include sufficient and appropriate waste storage and recovery facilities in their design and layout.

4.24 The provision of facilities for the separate collection and storage of wastes within all developments enables a greater proportion of waste arisings to be diverted from landfill, and to be separated for reuse. This applies to all new built developments: factories and employment sites, housing, offices, commercial space, and public buildings. A Supplementary Planning Document (SPD) 'Managing Waste in New Developments', was adopted in 2006. It is important that the SPD is taken into account from the conception stage, when developers design new buildings, regardless of the intended end use, so that the occupiers of all new buildings are able to contribute to the move to a materials reusing economy.

Waste Core Policy WCP8: Non-hazardous waste transfer and materials recovery

Proposals for waste transfer and material recovery operations will be directed towards:

- A Strategic recovery site set out in WCP 2; or
- an existing employment area of similar uses; or
- within the area of and for the duration of an existing planning permission for a waste related use; or
- within the area of, and for the duration of an existing planning permission for minerals extraction; or
- within areas of despoiled, contaminated or derelict land.

Proposals for waste transfer/materials recovery operations in locations other than those listed above will only be permitted if it can be demonstrated that:

- they serve an identified local need which can not be met by existing facilities, and;
- no land in the above categories is available, or that use of such land would be contrary to the proximity principle with regard to the anticipated source of waste.

4.25 Facilities for the separation and bulking up of wastes are an important link in the overall network of waste management facilities for the Plan area. Waste materials that are sent to transfer stations are 'bulked up' for onward dispatch, either to reusing industries, or to facilities for their final disposal.

Waste Core Policy WCP9: Composting

Composting facilities will be permitted in the following locations, so long as they are at least 250 metres from any residential property, work place, or other occupied building:

- within the area of and during the planning permission for a waste related use (including sewage treatment works); or
- within the area of and for the duration of a planning permission for minerals extraction; or
- within areas of previously despoiled, contaminated or derelict land; or
- on agricultural land; or
- for enclosed systems only, on existing employment areas of similar uses.

4.26 In the Waste Hierarchy, composting is considered as a form of materials recycling. Composting is the biological degradation of organic waste which generates a useful end product. There are some concerns about the risk to health of microbiological organisms associated with open air composting operations, and the minimum distance to occupied property recommended is 250 metres. There is also a form of composting which is fully enclosed. This allows for impacts to be better managed, and therefore it may be possible to locate such facilities closer to other development.

Waste Core Policy WCP10: Anaerobic Digestion

Proposals for anaerobic digestion facilities will be permitted:

- within a strategic recovery site set out in WCP2; or
- within the area of an existing planning permission for a waste management related use (including sewage treatment works); or
- on an existing employment area or similar uses; or
- within areas of previously despoiled, contaminated or derelict land; or
- on agricultural land

4.27 Anaerobic digestion (AD) is a biological degradation process that takes place in an oxygen-free environment. Although most frequently used to manage sewage sludge in the UK, it can be used for other wastes with a high organic content. Similar to In-Vessel Composting, AD has the scope to generate energy from the gases produced. In land use terms it can be relatively innocuous, and involves industrial structures.

Waste Core Policy WCP11: Energy generation from waste

Proposals for energy generation from waste will be viewed favourably only where they recover energy from waste which has already undergone maximum practicable recovery, and permitted at the locations identified in WCP2. Proposals for energy generation must consider the potential for combined heat and power capability.

4.28 The generation of energy from waste takes many forms, including the utilisation of the gases generated from landfill sites, and from anaerobic digestion processes. This can count as renewable energy under the Renewable Obligation Certificate scheme regulated by Ofgem (the Office of the Gas and Electricity Markets). Waste management facilities, which are bespoke energy from waste facilities, can recover the energy from the waste that has been subject to other recovery processes previously, and thereby ensure that the Waste Hierarchy is applied. This Policy seeks to ensure that energy recovery occurs as the last process applied in waste management following the application of other recovery operations (as defined in the Waste Framework Directive 2008). Bespoke 'energy-from-waste' facilities should be sited close to major sources of waste, and are directed by this Policy to the strategic sites in WCP2. This would assist in encouraging the co-location of energy generation with other forms of waste recovery processes on the same site. This policy of providing a limited number of strategic locations which can serve the major urban areas within the Plan area will balance the need for such facilities, and locate them in appropriate locations. In addition, there is the scope for heat and electricity from this energy from waste facilities to provide energy in nearby housing, commercial, and employment sites (i.e. Combined Heat and Power). Given the agenda for substantial housing growth in the Plan area, it is expected that there is the scope for this source of renewable energy to be utilised substantially in new developments.

Waste Core Policy WCP12: Landfilling of waste

Planning permission will only be granted for the landfilling of non-hazardous waste where it can be demonstrated that the provision of landfill capacity is required to meet an identified need which cannot be met by the management of waste higher up the Waste Hierarchy or there is a need to reprofile an existing landfill site to address safety and/or pollution issues.

4.29 Two of the key objectives of the Core Strategy are to reduce the reliance upon landfilling, and to increase the amount of recovery capacity. These two objectives are linked, in that a higher level of recovery of waste reduces the need for landfill capacity, and conversely a lower amount of recovery capacity increases the need for landfill capacity. However, for the period of the Core Strategy it is envisaged that there will still be some ongoing need for landfill capacity for non-hazardous waste will not completely end. Two strategic landfill sites for residual Non-Hazardous waste are identified in Waste Core Policy 2.

Waste Core Policy WCP13: Sewage Treatment Facilities

Proposals for new sewage treatment works will only be granted permission when it can be demonstrated that the need for the development cannot be accommodated at an existing site.

4.30 Provision for processing of sewage sludge to produce beneficial products will be sought where appropriate, including co-treatment of sewage sludge with other wastes. The management of sewage sludge relies upon Sewage Treatment Works, which are generally sited on the edge of settlements near to watercourses to receive their treated water. New facilities are unlikely to be required within the Plan area,

since the anticipated pace of housing growth does not suggest any likely capacity problems given the existing network of water treatment facilities. Sewage sludge can be managed in combination with other organic wastes, for example in anaerobic digestion. Any proposals for new sewage sludge facilities will be expected to consider managing other organic wastes with sewage sludges.

Waste Core Policy WCP14: Clinical waste

Facilities for the thermal treatment of clinical waste will be permitted at the locations set out below providing such waste cannot be managed at an existing facility:

- the site of a medical research establishment or a hospital generating clinical waste;
- in conjunction with an installation used or proposed for the thermal treatment of other wastes.

4.31 Clinical waste, which include drugs, swabs, syringes and human and animal tissue, are mostly generated by hospitals, clinics and GP surgeries. However, some is also generated in residential, nursing and retirement homes.

Waste Core Policy WCP15: Hazardous Waste

Proposals for facilities for the disposal of hazardous waste by landfilling will not be permitted except for discrete "monocells" within non-hazardous waste landfill sites. Proposals for the transfer/bulking up of hazardous wastes will only be permitted on land at existing waste management sites and/or employment sites, and where they are not in close proximity to sensitive occupiers. Other hazardous waste recovery operations will normally be acceptable in the following locations:

- an existing employment area of similar uses; or
- within the area of and for the duration of an existing planning permission for a waste related use; or
- within the area of, and for the duration of an existing planning permission for minerals extraction; or
- within areas of despoiled, contaminated or derelict land
- within the area of a Strategic recovery site as set out in Waste Core Policy WCP 2

4.32 Hazardous waste is only disposed of to landfill in a small number of nationally important sites, or else in dedicated "monocells" within non-hazardous waste landfill sites. No such sites exist within the Plan area. Hazardous waste transfer facilities may accumulate loads of (pre-packaged) hazardous waste before transporting it to a point of disposal, and therefore make a useful contribution to the overall network of waste management facilities.

Waste Core Policy WCP16: Inert wastes

Planning permission will be granted for the recycling of inert waste at sites that are either:

- an existing employment area of similar uses; or
- within the area of and for the duration of an existing planning permission for a waste related use; or
- within the area of, and for the duration of an existing planning permission for minerals extraction; or
- within areas of despoiled, contaminated or derelict land.

Proposals for the landfilling or other disposal to land of inert wastes except where they would contribute to the reclamation of former mineral working voids, or give rise to an environmental benefit.

4.33 Large amounts of waste arises from the demolition of buildings and structures on land during its redevelopment, as well as material from the maintenance of utilities buried below ground. In 2009 approximately 1,100,000 tonnes of construction, demolition, and excavation waste arose within the Plan area. It is anticipated that this will increase to 1,300,000 by the end of the Plan period. Most of these materials are non-polluting and if disposed of to landfill are counted as inert. Most of this material can be re-used, and give rise to soils or act as replacement for aggregates. Many redevelopment sites use crushers and screens to enable on site demolition wastes to be reused within the development site as a form of construction material. By this means the use of natural aggregate is reduced, and inert waste is reused. In addition, some of these wastes arising from construction and demolition activities are processed away from the site where they arose, on dedicated aggregates recycling facilities. This re-use of a waste as a replacement for aggregate has been encouraged by the Aggregates Tax. Finally, the traditional management method for construction and demolition wastes was their use in backfilling mineral voids and enabling their reclamation.

Waste Core Policy WCP17: New Waste Management Facilities and Strategic Transport

All new waste management facilities will be required to conform to the adopted Freight Strategies and Policies for its area in respect of the management of traffic to and from the site. The locations of new waste facilities will only be permitted where they can easily access the Designated Road Freight Network of the Councils within the Plan area. New applications will only be granted where they are accompanied by legal agreements to ensure that waste traffic follows an agreed route to/from the Designated Road Freight Network.

4.34 Some municipal waste is hauled over relatively short distances from the point of arising (residential areas, shops, offices, employment areas) to the point of management, whether by Recovery or Disposal. The Plan area does not have an extensive rail network which would enable waste to become less reliant on road transport in the future. Consequently it is expected that vehicles carrying waste from the point at which it arises for management off site will continue to form a significant element of the total traffic using the local road network, and have the ability to detrimentally impact on the quality of life of communities along their route. Consequently it is desirable, for safety and amenity reasons, to control the routes taken by traffic to/from waste management facilities and concentrate waste traffic management onto the Designated Road Freight Network as set out in the Freight Strategies and policies of each of the three Councils. These controls will reduce the impact of waste management developments, and make them more acceptable.

5 Strategic Mineral Sites and Mineral Core Policies

5.1 The Plan area is a significant producer of aggregate sands and gravels, industrial (silica) sands, as well as chalk (for cement manufacture, and building stone) and historically, other minerals such as Cornbrash Limestone for use as building stone. Aggregate sands and gravels are essential materials for the construction industry, and broadly used within a short distance from which they are produced (see Minerals Technical Evidence Paper 1 (MTEP1): Aggregates Landbank Study 2005 by Cuesta, 2005). Silica sands are used for a wide variety of uses in glass manufacture, horticulture, brick facing, concrete block manufacture, as a water filtration media, and as specialist growing media for sports pitches (see Minerals Technical Evidence Paper 2 (MTEP2): Silica Sand Study 2006/07 by Cuesta). Chalk is worked at two quarries. One site supplies a cement works in Warwickshire, while harder material is worked at another to provide a vernacular building stone.

5.2 Minerals can only be worked where they occur. Their release through the planning system is subject to a range of constraints such as landscape and wildlife designations, planned surface developments and road schemes. Potential mineral sites can be constrained by surface utilities, landownership issues, and especially by the limitations of the local highways network. In response to the invitation from the Mineral Planning Authorities, fifty mineral sites were proposed for potential allocation, by landowners and mineral developers, from 2007 onwards. However, only a small number of sites are identified as strategic sites as they are considered essential to achieve the objectives of the Core Strategy.

5.3 The Spatial Strategy for the supply of aggregate sands and gravels, and specialist silica sands is set out in policy MCP1. Aggregate sand and gravel is present in the Upper Ouse Valley. However it is considered that this area, given the local road network and its landscape quality, is too sensitive to sustain aggregates extraction. Applications for the release of the Strategic sites set out above will be considered against the Mineral Core Policies, as well as the saved Policies from the Bedfordshire and Luton Minerals and Waste Local Plan (until such time as they are replaced by the General and Environmental Policies DPD).

Mineral Core Policy MCP 1 Overall Spatial Strategy for Aggregate Sand and Gravels and Silica Sands

There will be a general presumption against further mineral working in the Upper Ouse Valley. Aggregate minerals will be sourced from the river valley sands and gravels of the Lower Ouse and Ivel Valleys, the glacial sands and gravels of the Biggleswade area, and the Cretaceous sands of the Greensand Ridge. Specialist silica sands will be sourced from sites in the vicinity of Leighton Buzzard and Heath and Reach.

Strategic mineral sites for the supply of aggregate sand and gravels are allocated as follows:

- Willington Lock
- Blunham/Roxton
- Black Cat
- Willowhill Farm
- Bridge Farm
- Land south of BroomVillage

and for specialist silica sands:

- Land at Clipstone Brook

Within the above framework, sites are allocated for mineral working according to the following sequential test:

Minerals and Waste Core Strategy Plan for Submission

1. Extensions to existing mineral extraction sites
2. "Satellite" extraction sites serving an existing processing plant site
3. New sites not connected with any existing operation.

Provision of Aggregates

5.4 The Core Strategy provides for the continued supply of aggregate sands and gravels, so as to supply areas of future growth with construction materials.

The Core Strategy has two key aims:

- to provide an average of 1.84 million tonnes per annum of sand and gravel for each year of the Core Strategy, until such time that national guidelines on aggregate production are further revised
- to maintain a landbank (a stock of reserves in the ground with planning permission) sufficient for at least 7 years supply of sand and gravel.

5.5 The assessment of need for aggregate sands and gravels up to 2028 is set out in Mineral Technical Evidence Paper 3 (MTEP3). The starting point for the provision of aggregate minerals is national policy, which is to maintain a landbank (a stock of reserves with planning permission sufficient for at least seven years working of sand and gravel). In order to maintain the provision of 1.84 million tonnes per annum throughout the Plan period the Core Strategy needs to provide for the release of 27.6 million tonnes of sand and gravel aggregate. In December 2010 there were 22.88 million tonnes of aggregates with planning permission, during which year there were sales of 1.15 million tonnes. The sales of aggregates in the Plan area are expected to remain at this level from 2010 to 2013. Nevertheless provision has to be made for the release of aggregate sand and gravel at the Apportionment figure of 1.84 million tonnes per annum during this period, which equates to 5.52 million tonnes as well as the Plan period from the expected date of its adoption in 2013 up to 2028.

Mineral Core Policy MCP2 The Provision of Aggregates

The Mineral Planning Authorities will monitor the permitted reserves of aggregate minerals, and endeavour to maintain a landbank sufficient for at least seven years throughout the Plan period. Should the aggregates landbank fall below seven years the Mineral Planning Authorities will take appropriate action in order to identify the need, and where appropriate, grant planning permission, for the release of additional reserves.

5.6 Government Policy on the provision of aggregate minerals contained in MPS1 requires that a landbank of permitted reserves are maintained, (which is a stock of land with planning permission) sufficient to maintain production for a minimum period of seven years. MTEP3 identifies the amount of sand and gravel required to be permitted in the fifteen year life of the Core Strategy as 9.24 million tonnes, based upon the existing permitted reserves and the apportionment of the national forecasts produced in 2010.

5.7 The Core Strategy is expected to be adopted in 2013, five years after the start of the current downturn in the economy, and at a time when each of the three Councils are progressing Local Development Frameworks in respect of housing and employment. While there is likely to be development for housing and employment to the west and south of Bedford and near other centres of population in the Plan area, the pace of development is unlikely to be as rapid as it was before the 2008 financial crisis. Nevertheless, the provision of aggregate reflects national guidelines and the sub-regional apportionment agreed between the Mineral Planning Authorities of the East of England former region.

5.8 Local and national economic circumstances can change rapidly over the 15 year life of the Core Strategy. It is therefore vital to monitor the output and reserves of aggregates producing sites within the Plan area. If the level of permitted reserves falls below that which would ensure supply for a minimum

period of 7 years then the Mineral Planning Authorities may need to be mindful of allowing further reserves to be permitted. The issue of supply would be a material consideration in the determination of individual applications.

5.9 In addition to the permitted reserves at existing workings, new Strategic sites for the production of sand and gravel aggregates will be required. In order to maintain supply of a minimum of 1.84 million tonnes per annum, an additional 10.07 million tonnes of sands and gravels will need to be released up to and throughout the Plan period. The Strategic aggregate sand and gravel sites which will supply this amount of aggregate sand and gravel are set out in policy MCP1.

Provision of Secondary Aggregates

5.10 The Government, and the three Councils as Mineral Planning Authorities, are committed to increasing the production and use of recycled aggregates, in order to reduce the amount of land won aggregates that is required. This is reflected in national planning policy guidance. For example, the 2005 Guidance requires that the East of England region should provide 117 million tonnes of alternative materials over the period from 2005 to 2020. This has been taken into account in drawing up the regional figure for sand and gravel, from which the figure for the Plan area was developed (1.84 million tonnes per annum). WCP 16 is the appropriate Policy concerning the locations for inert waste recycling which can provide recycled aggregates.

5.11 The existing facilities for aggregates recycling are included in the Waste Evidence Base documents. Several sites exist which are dedicated to recycling construction and demolition wastes in order to produce recycled aggregates. However the use of recycled aggregates will need to be encouraged by all means available in order to realise the contribution these materials can make to construction and development in the Plan area.

Mineral Core Policy MCP 3 Secondary Aggregates

The Mineral Planning Authority will give priority to the production and supply of recycled/secondary aggregates to be used in preference to land won aggregates.

5.12 The regional strategy seeks to ensure the sustainable use of minerals. This includes using an increasing amount of secondary and recycled aggregates in place of virgin materials so as to husband scarce resources.

Provision of Silica Sand

Mineral Core Policy MCP 4 Provision of Silica Sand

Further silica sand will only be released where there is a demonstrable need for the product, and this need cannot be met from existing sites in the plan area, or from alternative materials.

5.13 Silica sand is won by a small number of companies within the Plan area, who operate a number of quarries mostly, in the Heath and Reach area near Leighton Buzzard. This mineral is increasingly used for specialist and non-industrial uses, including water filtration media, as a growing media for sports pitches, and for equestrian facilities. It will be important to ensure that the supply of specialist sands continues for this diverse range of applications.

5.14 Industrial/Silica sand is the subject of separate planning guidance (MPG15). This states that MPAs should aim to ensure that landbanks of at least 10 years are maintained for individual sites. However, the need for further reserves needs to be balanced against environmental constraints and there may be

overriding environmental reasons why stocks of permitted reserves are not replenished. Where significant capital investment is required it may be necessary for plant to be provided with a stock of permitted reserves to provide for at least 15 years of operation depending on the circumstances. In addition to this advice given on the provision of landbanks of silica sand it is now the case that the uses to which this sand is put have changed from the limited range of industrial uses for the mineral which were set out when the national guidance was issued in 1996. Silica sand deposits have a variety of grain size and this affects the uses to which the sand is put. Therefore, there may be a justification for the opening of a new quarry or extending an existing quarry to ensure the ongoing provision of a particular type of silica sand even though there may be sufficient reserve already permitted in terms of years. This can result in an overall increase in the permitted landbank.

5.15 As a result of the evidence discussed in the Silica Sand Study 2006/07 (MTEP 2), and the results of the annual mineral surveys produced since then, it is considered appropriate to identify a strategic site to enable the continued supply of industrial silica sand. The Core Strategy therefore seeks to make provision for the supply of provision of silica sand for specialist uses. In order to maintain continuity of supply of industrial sands which can supply a range of uses, land at Clipstone Brook is identified as a strategic minerals site. This can supply an estimated 2.5 million tonnes of industrial sand and will replace those sands currently extracted from Platts Quarry which is coming to the end of its operational life.

Mineral Core Policy MCP 5 Mineral Extraction outside Allocated Sites

Mineral extraction outside of the identified Strategic sites will not be permitted unless it can be demonstrated that there is an overriding need for an exception to this Policy.

5.16 Proposals for mineral working outside of the allocated Strategic sites identified in Mineral Core Policy MCP1 will not be permitted, and applications for sites outside of those allocated will be refused unless exceptional circumstances can be demonstrated (such as to prevent sterilisation of reserves). In such exceptional circumstances sites will be assessed against the sequential test in paragraph 5.4. The Strategic sites identified in Mineral Core Policy MCP1, in combination with existing permitted reserves, provide sufficient mineral for the Plan period, and are located so as to cause the least environmental impact.

5.17 Large permitted reserves of clay exist in the Marston Vale area to the south-west of Bedford. However, nationally the brick industry has consolidated in recent years, and there is no longer an operational brick works in the Plan area. Apart from occasional demand for engineering material, there is no demand for large scale clay extraction, and no new sites for clay are allocated in the Core Strategy. No new sites for working brickclay are being pursued for inclusion as part of this process.

5.18 Fullers Earth has been worked in the south-western part of the Plan area intermittently. This is a mineral of rare occurrence, and which has no national planning policy guidance. In the absence of an identified need, no sites are identified for this mineral. No new Fullers Earth sites were suggested by landowners or mineral operators during previous stages of the preparation of the Core Strategy.

5.19 Chalk is produced in large quantities to supply a cement manufacturing plant outside of the Plan area. This site has significant reserves (over 47 million tonnes in 2009, according to the Annual Monitoring Report for 2009-10) which will last beyond the end of the Plan period. A further chalk quarry produces small quantities of vernacular building stone. However, it is sited in the Chiltern Hills Area of Outstanding Natural Beauty, and it is inappropriate to identify a further site for production for this mineral within the AONB.

5.20 Cornbrash Limestone, which is currently imported from Lincolnshire and Northamptonshire, is used for the repair of monuments and buildings especially in the Upper Ouse Valley. However, there are resources of this mineral in the Upper Ouse Valley, although no sites have been identified where there are reserves of sufficient quality. Whilst no sites have been identified for the provision of this mineral, it will be safeguarded, since it lies beneath Sand and Gravel which occurs in the Upper Ouse Valley.

Mineral Core Policy MCP 6: Rationalisation of reserves and restoration of old sites.

Planning permission will be granted for proposals which:

- lead to the rationalisation of reserves and/or
- secure an appropriate after use of workings originating before planning control, or for which there exist inadequate planning conditions for restoration, and/or enhance standards of restoration.

5.21 Minerals can only be worked where they occur. This has brought about situations over time where mineral workings can be close to other occupiers, wildlife, or attractive landscapes. Long standing permissions and mineral workings may have the potential for rationalisation, which can bring about benefits for the environment and the community. For example, areas with mineral reserves may be voluntarily revoked in exchange for permission for reserves in less sensitive locations. In addition, powers exist to ensure that appropriate and modern planning controls can be attached to historic mineral planning permissions, including the scope to ensure that mineral workings sites are satisfactorily reclaimed.

5.22 All proposals for the rationalisation of workings will be considered on their merits. If the opportunity arises the Mineral Planning Authority will make suggestions to mineral companies regarding appropriate areas for revocation and substitution. Favourable consideration will be given to rationalisation proposals which achieve environmental or community benefits, such as amenity, informal recreation, and nature conservation. New proposals may also allow the Mineral Planning Authority to review the reclamation requirements of old sites. Mineral workings are capable of a range of afteruses depending upon the watertable, the depth of void remaining after mineral working, and the landuses around the site. A large proportion of mineral working land is reclaimed to agriculture, while provision for increased public access and provision of wildlife habitats are also common. In some parts of the UK commercial forestry has been the afteruse of sand and gravel workings, where the soils were appropriate, while some element of tree/woodland establishment are part of most reclamation schemes.

Minerals Core Policy MCP7: The Determination of Applications for Mineral Sites and Related Developments

All applications will be determined with regard to:

- the Mineral Core Policies in this DPD, which are appropriate to the application
- the Strategic Sites identified in this DPD for mineral extraction
- the Saved General and Environmental Policies in the Bedfordshire and Luton Minerals and Waste Local Plan (or such other Policies as may replace them)

5.23 This DPD is intended to guide them to appropriate locations for mineral extraction over the Plan period. In determining individual planning applications for mineral extraction and related development the Councils as Waste Planning Authorities will be reliant upon the Mineral Core Policies in this DPD. In addition, Mineral Planning Authorities (MPAs) will consider the details of the application against the General and Environmental Policies which were Saved by Direction of the Secretary of State from the Bedfordshire and Luton Minerals and Waste Local Plan, or such other Policies which may replace them, and any other appropriate Policies which form part of the Development Plan at the time.

Mineral Core Policy MCP8: Importation of materials for processing

The use and retention of mineral processing plants during and beyond the normal life of the associated mineral extraction operation, to allow for the processing of imported material, will only be permitted where:

- It enables the working of a site which is otherwise considered to be uneconomic and/or unworkable; or

- It allows material to be processed or blended to achieve a higher quality or more saleable product; or
- It enables the working of a nearby site where the establishment of a processing plant would be subject to overriding environmental objections.

5.24 Mineral working often requires the erection of associated structures and buildings, including processing plant. For example, sand and gravel needs to be washed and graded before the mineral products can be sold. Processing plants are generally operated to process material won from the sites on which they are located. However, they can also receive mineral from "Satellite" sites, which in themselves would not be acceptable if they were to include a processing plant on the site.

5.25 Mineral extraction is essentially a temporary use of land, and reclamation should follow the working of the site as quickly as possible. In order to avoid prolonging the life of a site the Mineral Planning Authority will normally resist proposals for plant and machinery used to process material won primarily from sites other than that at which they are processed, which would delay the reclamation of the site. Plant and machinery should normally be removed following the completion of working at the site on which it stands. However, if a processing plant is intended to handle mineral from other workings, this should be stated as part of the application, since there are highway implications of such activity.

5.26 There may be instances where the retention of a processing plant may be acceptable, for example when a mineral deposit is sparsely distributed and only worked on a small scale. Where a plant site is acceptable with respect to its environmental impact, then it may be acceptable for it to remain on site as a central processing facility. This would ensure the efficient exploitation of environmentally acceptable and recoverable mineral deposits. The key issues to be considered in all such proposals are the environmental, amenity, and transport impacts of intensifying the use or prolonging the life of the plant, and implications for the restoration of the site.

Mineral Core Policy MCP9: Borrow Pits

Borrow Pits will be permitted where they substantially meet the following criteria:

- The site is required to supply minerals to a specific major construction works;
- The site is well related geographically to the project it is intended to supply;
- The borrow pit will serve the related project only, and will not provide material for the wider market or be retained beyond the life of the project it serves;
- The borrow pit will bring about the removal of mineral and/or waste traffic movements from the public highway and/or from passing local communities;
- The borrow pit will be restored within the same timescale as the project to which it relates, and restoration can be achieved to an approved scheme in the event that it is only partly worked;
- There would be no importation of materials other than from the project itself unless required to achieve beneficial restoration as set out in an approved scheme;
- There is an overall environmental benefit as a result of the proposal and appropriate mitigation measures will be put in place to minimise any adverse environmental impacts.

5.27 "Borrow pits" are temporary quarries which provide mineral for a specific construction project, often a road or motorway. However, they need to be shown to be connected to the construction scheme; located appropriately; and provide a clear environmental benefit. These temporary mineral workings can provide material for a construction project more locally, and remove the additional traffic movements that would otherwise be associated. However any mineral working can impact on neighbours and the local environment detrimentally, and need to be carefully sited. As long as temporary mineral workings are restored to high standards they can contribute beneficially to the local environment.

5.28 Borrow pits arise where major proposals come forward, (usually road schemes) which require large volumes of construction materials, and there is a source of aggregate in the immediate area. However the consideration for the use of secondary/recycled aggregates is expected to occur before the developer looks for material from a borrowpit. However, not all materials needed for a construction project are likely to be available from the use of recycled aggregates and some virgin sand and gravel is likely to be required.

5.29 The use of borrow pits can lead to reduced haulage of minerals, and the associated use of the public highway. It can also lead to the use of lower quality mineral for such schemes rather than higher quality material from a quarry. However there are disbenefits to the use of borrow pits, as applicants are usually not experienced mineral or waste operators and can require greater guidance from the local authorities to ensure that the site is operated to an acceptable standard. In addition such sites may wish to continue and expand so as to serve an entirely different market to the one for which it was originally intended. So long as an adequate landbank of permitted reserve of aggregate minerals exists in the Plan area, then material for these schemes will normally be expected to be sourced from existing operational sites and from the use of recycled aggregates. However other relevant factors to be considered include:

- whether the scale of the material required and the timescale for its provision may pose problems for existing operational quarries
- whether the demand on local quarries would disrupt supply to other users of the same aggregate minerals
- whether specific community benefits may arise

5.30 Every proposal for a borrow pit may not be able to meet all the criteria listed in the policy above. Where this is the case, the local authority will consider whether there is an overall benefit arising from any proposal and could still determine any planning application positively.

5.31 There are extensive clay deposits within the Plan area, although no sites are operational at present. Clay is occasionally worked at temporary borrow pits, but can also be sourced from existing permitted sites, for uses which include the creation of noise attenuation bunds, or as engineering fill material.

5.32 All proposals for new quarries or extensions to quarries need to take climate change into account during their operation and subsequent restoration.

Minerals Core Policy MCP10: Climate Change

Minerals Development proposals, including operational practices and restoration proposals must take account of climate change for the lifetime of the development. This will be through measures to reduce greenhouse gas emissions and by measures to adapt to future climate changes.

Such measures may include:

- Quantifying the reduction in carbon dioxide and relevant greenhouse gases and means of their monitoring and how they will be monitored in the future
- Demonstrating how the design, location and transportation related to the development will limit greenhouse gas emissions.

Proposals should also set out how they are resilient to the changing climate and may therefore include :

- Incorporation of sustainable drainage schemes to minimise flood impacts
- Measures to enhance water efficiency
- Measures to adapt to the potential impacts of excess heat and drought
- How restoration schemes which will contribute to climate change adaptation will be encouraged (such as flood water storage and biodiversity schemes which create habitats which act as wildlife corridors and living carbon sinks).

Minerals Core Policy MCP11: Strategic Transport and protection of existing railhead facilities

All new quarries or extensions to quarries will be required to conform to the adopted Freight Strategy and/or policies of the Councils for their area in respect of the management of traffic from the site.

There will be a presumption against any development that could prejudice existing railheads used for the transportation of minerals into or out of the Plan Area.

There will be a presumption against any development that could prejudice rail served aggregate depots at Luton, (Leagrave Road and Crescent Road), and Elstow. Positive consideration will be given to any planning application for the development of new facilities within the boundary of the depots, subject to their being a need for the facility and the proposal being environmentally acceptable.

5.33 The Plan area does not have an extensive rail network and it is, therefore, anticipated that existing and proposed quarries will continue to be served by vehicles using the local road network and which has the potential to detrimentally impact on the quality of life of communities along their route. Consequently it is desirable, for safety and amenity reasons, to direct traffic arising from these sites onto the preferred road network, as set out in the Freight Strategy and/or policies of each of the three Councils. These controls will reduce the impact of the quarries, and make them more acceptable.

5.34 There are three existing railhead facilities within the Plan area that are used, generally, to import minerals, such as limestone that are not quarried locally but are needed for construction projects in the area. It is important that these facilities are safeguarded against any development that might prejudice their future use.

Mineral Safeguarding

5.35 It is important to protect mineral resources from needless sterilisation by surface developments. The Plan area contains a number of minerals of economic importance, whether they are individually worked at present or not. The presence of a significant mineral deposit will be a material consideration in determining proposals for surface development in the areas designated as Mineral Safeguarding Areas. These include:

- Aggregate sands and gravels
- Industrial Silica Sands
- Clay
- Chalk
- Fullers earth
- Limestone

5.36 The Plan area includes the river valleys of the Ouse, Ivel, and Flit which contain the aggregate sand and gravel resource. An additional source of aggregates occur within the Woburn Sands formation which is an important source of concreting, building, and asphaltting sands, and locally, industrial silica sands, and fuller's earth. In addition, the Marston Vale to the south of Bedford is an area of low lying land which contains significant clay deposits. Finally, in the southern part of the Plan area the land is underlain by chalk, and rises in topography to the eastern extremity of the Chiltern Hills Area of Outstanding Natural Beauty.

5.37 The areas to be subject to Mineral Safeguarding are shown on the attached plans. Most development proposed within an area designated for Mineral Safeguarding will be subject to MCPs 12 and 13.

Mineral Core Policy MCP12: Mineral Resource Assessment

Surface development proposals within a Mineral Safeguarding Area (excluding exemptions set out under Mineral Core Policy MCP9) shall be accompanied by a Minerals Resource Assessment. This shall be undertaken by a suitably qualified professional, which establishes through site specific geological survey data, the existence or otherwise of a mineral resource of economic importance.

5.38 The areas designated as Mineral Safeguarding Areas are shown on the plans in the Appendices. On receipt of a Mineral Resource Assessment the Local Planning Authority can decide on the most appropriate course of action. According to the results of this assessment in relation to the quality and quantity of mineral that could be recovered; the practicability of extraction; and the environmental impacts of mineral extraction, the mineral resource present may be required to be extracted before the surface development takes place, or else left in situ and allowed to be sterilised. Where prior extraction is deemed appropriate a separate planning application will be required for the extraction of the mineral. The boundaries of the Mineral Safeguarding Areas are shown on the Appendices.

Minerals Core Policy MCP13: Surface development within a Mineral Safeguarding Area

Surface development will only be permitted within a Mineral Safeguarding Area where it has been demonstrated that:

- The mineral concerned is proven to be of poor quality via the undertaking of the Mineral Resource Assessment; or
- The development will not inhibit extraction if required in the future; or
- There is an overriding need for the development and prior extraction cannot reasonably be undertaken; or
- The mineral can be extracted prior to the development taking place.

The following classes of surface development are considered to be of a nature unlikely to lead to the long term sterilisation of minerals and therefore MCPs 12 and 13 would not apply:

- Extensions of existing buildings within their curtilage;
- Infilling development except for proposals within 250 metres of an existing permission for mineral extraction/waste disposal;
- Minor development (such as walls, gates, accesses);
- Individual residential caravans for a period of less than 5 years;
- Amendments to previously approved developments;
- Applications for Listed Building Consent;
- Reserved matters;
- Changes of use (except where further built development is proposed).

Where a development is applied for which is of a form not exempt under this policy and within the area of a designated Mineral Safeguarding Area, then Minerals Core Policy MCP12 will apply.

5.39 Where it has been determined that it is necessary for the development to take place, and that the mineral is considered to be of sufficient quality and quantity etc, the mineral planning authority will seek prior extraction of that mineral subject to the provision of satisfactory information, including a full assessment and acceptability of:

- The size and nature of the proposed surface development
- The quality and quantity of the mineral that would be recovered
- The practicability of extraction
- The environmental impacts of mineral extraction
- The size and nature of the proposed development

By this means valuable mineral resources will be Safeguarded from needless sterilisation.

6 Delivery Strategy and Monitoring

Introduction

6.1 The Minerals and Waste Core Strategy is based upon the best currently available information. However, there will be a need to monitor the Core Strategy throughout its life in order to ascertain how effectively the Policies are being implemented.

6.2 The Planning and Compulsory Purchase Act 2004 requires the production of an Annual Monitoring Report each year, which is then submitted to the Secretary of State. Annual Monitoring reports cover a financial year, running for 12 months from 1st April to 31st March the following year.

The Annual Monitoring Report will include an assessment of:

- The extent to which national targets, objectives, and policies, are being achieved
- Any possible changes needed, if a Policy is not achieving its intended aim, or the targets are not being met.
- Progress in implementation of the Minerals and Waste Local Development Scheme and preparation of the Minerals and Waste Development Plan Documents.

Delivering the Core Strategy

6.3 The Objectives for both Minerals and Waste are set out in Chapter 3. This Chapter addresses how the separate objectives for Waste and Minerals will be delivered and monitored.

How will the Waste Objectives be achieved?

Objective 1. To promote the reduction of waste arisings

Action	Parties
<ul style="list-style-type: none"> - Initiatives at both national and local level to promote waste reduction. These include those by WRAP (the Waste and Resources Action Programme) including the Halving Waste to Landfill initiative - The educational initiatives by Local Authorities encouraging residents to produce less waste arisings, and recycle more. - Site Waste Management Plans, which apply to construction projects over a threshold value. 	<ul style="list-style-type: none"> - WRAP (Waste Resources Action Programme) including the Halving Waste to Landfill initiative. - the building and construction industry - The Environment Agency, and the three Councils (as Local Planning Authority, Waste Collection/ Disposal Authority, Environmental Health Authority, and Trading Standards Authority) are the regulatory authorities for enforcing and monitoring Site Waste Plans -The three Councils as Local Planning Authorities.

Objective 2. To manage sustainably as much waste as possible arising from within the Plan area, and take a small and diminishing apportionment of London wastes for landfilling.

Action	Parties
<p>-The majority of wastes which arise from within the Plan area are capable of being appropriately managed by a combination of the existing and new facilities which will deliver the additional capacity required.</p> <p>- There are a limited number of waste streams which will continue to require management beyond the Plan area, these include:</p> <ul style="list-style-type: none"> • clinical wastes, (which are currently sent for specialist management before being landfilled). • hazardous wastes, (which are presently sent specialist management or to landfill sites beyond the Plan area). • low level nuclear wastes. 	<ul style="list-style-type: none"> - Private waste management operators - Waste Planning Authorities - the three Councils as Waste Disposal Authorities - Managers of Business, Clinical, Hazardous, and Low Level Radioactive wastes - the Mayor of London - London Borough Councils as Waste Disposal Authorities

Objective 3. To move away from dependence upon landfilling

Action	Parties
<ul style="list-style-type: none"> - Provide for additional non-landfill waste management capacity - Provide for a limited amount of non-hazardous landfill capacity based upon the assumption that 100% of waste will be pre-treated before either intensive residual treatment or landfilling 	<ul style="list-style-type: none"> - Waste Planning Authorities - Private sector waste managers - Three Councils as Waste Disposal Authorities

Objective 4. To provide greater capacity for the recovery of materials and energy

Action	Parties
<ul style="list-style-type: none"> - the Core Strategy sets out a spatial distribution for the location of Strategic and non-Strategic waste management. - the Core Strategy provides land for additional waste management capacity 	<ul style="list-style-type: none"> - The three Councils, as Waste Planning Authorities and Waste Disposal Authorities - private waste management operators

Minerals and Waste Core Strategy Plan for Submission

Objective 5. To protect and enhance the biodiversity and landscape fabric of the Plan area

Action	Parties
<ul style="list-style-type: none"> - Design the final landform and afteruse of landfill sites so as to be sympathetic to the surrounding area and to positively enhance the biodiversity and landscape - Design buildings, structures, and landscaping so as to be sympathetic to the surrounding area and, where appropriate, to positively enhance the biodiversity and landscape. 	<ul style="list-style-type: none"> - Waste Planning Authorities - Private sector waste operators - the Environment Agency

Objective 6. To protect and enhance the safety of the road network

Action	Parties
<ul style="list-style-type: none"> - The Strategic waste sites for landfill and non-landfill waste development have been selected partly because of their linkages to the major highway network, and are therefore beneficial in directing waste traffic onto these major roads. - The Freight Strategies (as part of the Local Transport Plans) of the three Councils encourages and directs freight traffic onto strategic roads. 	<ul style="list-style-type: none"> - The three Councils as Waste Planning Authorities - The three Councils as Local Highway Authorities - the Highways Agency, in respect of trunk roads and motorways

Objective 7. To protect and enhance the cultural, social and environmental heritage of the Plan area

Action	Parties
<ul style="list-style-type: none"> - Ensure that waste management activities with large volume throughputs take place on Strategic Recovery sites, which will minimise impacts on areas of heritage, environmental, or cultural value. 	<ul style="list-style-type: none"> - Waste Planning Authorities - the three Councils as Waste Disposal Authorities

Objective 8. To provide a network of facilities close to waste arisings and with suitable road networks so as to reduce transport issues and support the carbon agenda, appropriate to the kind of waste to be managed,

Action	Parties
<ul style="list-style-type: none"> - Develop, permit and implement a network of waste management facilities located in close proximity to the source of arisings, and which have suitable access and road networks which would serve them. 	<ul style="list-style-type: none"> - the three Councils as Waste Planning Authorities - the three Councils as Waste Disposal Authorities - private waste management operators - the three Councils as Highway Authorities

Risks and contingencies the delivering the Waste Strategy.

The Central Bedfordshire Council municipal waste procurement project

6.4 Within the Plan area, two of the three Councils have their own contractual arrangements with private sector waste companies for the collection and management of their area's municipal wastes. In addition, Central Bedfordshire Council is undergoing a procurement process through the BEaR project for a new waste management contract. The announcement of the Preferred Bidder is unlikely to take place until 2012, and it is not known at present whether the Preferred Bidder will offer a solution using land within the Plan area. However the site at Thorn Turn is owned by Central Bedfordshire Council and has been offered to bidders as being available. In addition Bedford and Luton Borough Councils have existing contracts for municipal waste management which will expire later in the Plan period, after which new contracts will be let (see Waste Evidence Base 5: Municipal waste management contracts and arrangements). It is not possible to be certain about how this Core Strategy will assist in delivering these potential new contracts, apart from providing a choice of sites for potential bidders.

The Covanta Energy development and Biogen Power

6.5 A Public Inquiry was recently held concerning an application for a gasification plant on land at Twinwoods Business Estate, north of Bedford, intended to manage 120,000 tonnes of waste per year. The outcome of that Appeal has been deferred by the Secretary of State as a result of the decision to grant consent for the development by Covanta Energy at Rookery Pit.

6.6 The Infrastructure Planning Commission has announced its intention to grant a Development Consent Order for the development by Covanta Energy of an energy from waste facility on land at Rookery Pit South, to the south-west of Bedford. Final approval is subject to Special Parliamentary Procedure. It is intended to handle a nominal throughput of 585,000 tonnes per annum, rising to a maximum of 645,000 tonnes of waste per annum. If this facility were to manage wastes which arose solely from the Plan area then its intended capacity would be more than sufficient to provide the amount of recovery capacity that is forecast to be needed for the whole of the Plan area. However, the facility intends to seek wastes from municipal, commercial and industrial sources from a wide area extending to several Counties and unitary authority areas. The scope to source a large proportion of the wastes that it may handle from a considerable distance away, if constructed and operational and subject to the results of Local Authority procurement exercises is emphasised by the fact that the applicant is unwilling to be restricted to managing waste from the Plan area. Given the uncertainties about the national economy, and the level of future growth in the Plan area, there is no certainty that the operator will secure sufficient contracts to justify building such a large facility. This could create a scenario where in theory there existed sufficient permitted capacity within the Plan area, such that it could "crowd out" other facilities from coming forward, although no facilities were actually constructed and operational.

6.7 In order to ensure the delivery of operational capacity in the Plan area, which would be able to manage the volumes of the majority of the wastes which arise within the Plan area, four strategic sites for recovery are identified. The identification of these sites allows for a choice of potential locations to the waste management industry for the large scale waste management sites. The major issue is that such facilities should serve the Plan area by managing waste from the Plan area. It is not expected that all of the sites identified will be developed and result in operational capacity, as there will not be sufficient local waste contracts to supply them. However, there is a danger that unless catchment area restrictions are able to be applied, this could result in substantial volumes of wastes being imported to feed spare capacity. In the longer term, once there is a sufficient network of operational waste facilities in the country, catchment area restrictions may no longer be necessary. However, this is a scenario which is only likely to occur at the end of the plan period, and certainly not before any plan review.

Waste Core Policy	Indicators	Related Waste Objective	Target	Implementation Parties
WCP 1 To provide sufficient recovery capacity for waste arising from within the Plan area to achieve the recovery targets set by dates	Annual arisings and management capacity for different waste streams	2	Recover 70% of MSW by 2015, and 75% of C/I waste by 2015	Waste Planning Authorities Waste Disposal Authorities Waste Industry Producers of Commercial/industrial wastes
WCP 2 To identify where strategically important waste management should take place during the Plan period	Percentage of planning applications for Strategic waste facilities located on the sites identified in WCP 2	2,3,4,6 and 8	100% of sites developed for Strategic uses are on identified sites	Waste Planning Authorities Waste Disposal Authorities Waste Industry
WCP 3 To identify how applications for waste management facilities will be determined.	Percentage of applications for waste facilities determined according to relevant Waste Core Policies, taking into account the strategic sites, and the Saved General and Environmental Policies.	2,3,4,6, and 8	100% of applications determined according to Waste Core Policies, and taking into account the strategic sites, and the Saved General and Environmental Policies	Waste Planning Authorities Waste Disposal Authorities Waste Industry
WCP 4 To promote high quality design and layout of new built waste management developments	Percentage of applications for waste facilities that show high quality of design and layout	4,5 and 7	100% of new waste facilities to be designed according to the CABE Design Guide for Waste Management Facilities	Waste Planning Authorities Waste Disposal Authorities Waste Industry
WCP 5	Percentage of applications for	8	100% of new waste facilities permitted	Waste Planning Authorities

Waste Core Policy	Indicators	Related Waste Objective	Target	Implementation Parties
To ensure that climate change is taken into account in determining applications for waste management facilities.	waste facilities that include provision for climate change mitigation measures.		include climate change mitigation measures	Waste Disposal Authorities Waste Industry
WCP 6 To restrict the sources of waste managed by facilities in the Plan area	Percentage of applications for Strategic facilities which are permitted with Catchment Area Restrictions	1,4,5 and 7	100% of new Strategic waste facilities to be subject to Catchment Area Restrictions	Waste Planning Authorities Waste Disposal Authorities Waste Industry
WCP 7 Including waste management in new built developments	- Percentage of applications for built developments that include provision for waste storage and recovery	4,5 and 7	100% of new built developments to be built including waste storage and recovery facilities according to Policy WCP7	Waste Planning Authorities Waste Disposal Authorities Waste Industry
WCP 8 To identify suitable locations in generic terms for non-inert waste transfer and materials recovery facilities	Percentage of applications for non-inert waste transfer and materials recovery facilities	4,5,7,8	100% of non-inert waste transfer and materials recovery facilities located in accordance with Policy WCP8	Waste Planning Authorities Waste Disposal Authorities Waste Industry
WCP 9 To identify generic suitable locations for composting	Percentage of applications for composting approved which complied with the locational criteria set out in Policy WCP 7	4,5,6,7 and 8	100% of composting facilities located according to WCP 9	Waste Planning Authorities Waste Disposal Authorities Waste Industry
WCP 10 To identify generic suitable locations for anaerobic digestion	Percentage of applications for anaerobic digestion facilities which are located in	4,5,6,7 and 8	100% of Anaerobic Digestion facilities located in accordance with Policy WCP 10	Waste Planning Authorities Waste Disposal Authorities

Waste Core Policy	Indicators	Related Waste Objective	Target	Implementation Parties
	compliance with Policy WCP 8			Waste Industry
WCP 11 To identify circumstances where proposals for energy generation from waste will be acceptable	Percentage of applications for energy generation from waste located on sites identified in WCP 2 and manage waste which has undergone maximum practicable recovery.	4,5,6,7 and 8	100% of energy from waste proposals are located in the Strategic sites identified in Policy WCP 11	Waste Planning Authorities Waste Disposal Authorities Waste Industry
WCP 12 To identify the circumstances where proposals for landfilling non-hazardous waste will be permitted	Percentage of applications for landfilling non-hazardous waste which comply with WCP 10	4,5,6,7 and 8	100% of non-hazardous landfill applications to comply with WCP12	Waste Planning Authorities Waste Industry
WCP 13 To identify the circumstances where proposals for new sewage treatment works will be acceptable	Percentage of applications for new sewage treatment works	4,5,6,7 and 8	100% of applications for new sewage treatment works approved according to the circumstances set out in WCP 13	Waste Planning Authorities Waste Disposal Authorities Waste Industry
WCP 14 To identify the circumstances where proposals for clinical waste facilities would be acceptable	Percentage of applications for managing clinical waste	4,5,6,7 and 8	100% of applications for facilities to manage clinical waste approved according to the circumstances set out in WCP 14	Waste Planning Authorities Waste Industry NHS and Health Care providers
WCP 15 To identify the appropriate circumstances for the landfilling of hazardous waste	Percentage of applications for the recycling or landfilling of hazardous wastes	4,5,6,7, and 8	100% of applications for facilities to manage hazardous waste approved according to the circumstances set out in WCP 15	Waste Planning Authorities Waste Industry

Waste Core Policy	Indicators	Related Waste Objective	Target	Implementation Parties
<p>WCP 16</p> <p>To identify the circumstances where proposals for recycling and/or land filling of inert wastes would be acceptable</p>	Percentage of applications for the recycling or landfilling of inert wastes	4,5,6,7 and 8	100% of applications for facilities to recycle or landfill inert wastes to comply with WCP16	<p>Waste Planning Authorities</p> <p>Waste Industry</p>
<p>WCP 17</p> <p>To identify the circumstances where new waste management proposals will be acceptable in relation to the strategic transport policies</p>	Percentage of applications for the management or disposal of waste	4,5,6,7 and 8	100% of applications for facilities for waste management facilities which comply with the Strategic Transport Policies of the Local Transport Plans	<p>Waste Planning Authorities</p> <p>Waste Industry</p>

How will the Mineral Objectives be achieved?

1. To identify appropriate reserves for aggregates and specialist (silica) sands.

Action	Parties
Identifying and maintaining appropriate landbanks are dependent upon national planning policy guidance, and the provision of good quality data concerning reserves and output from the operators of aggregates and silica sand producing sites.	Mineral Planning Authorities Mineral operators

2. To specify strategic sites for the supply of identified mineral needs, and to ensure that these sites represent the most sustainable options.

Action	Parties
Strategic mineral sites for the production of aggregates and silica sand are identified in Chapter 6 The Strategic mineral sites that were selected have been subjected to a sequential test, as well as a Sustainability Appraisal.	Mineral Planning Authorities

3. To conserve mineral resources by protecting them from sterilisation, encouraging their prudent use, and specifying appropriate phasing mechanisms for their release and the increasing use of secondary aggregates.

Action	Parties
- Mineral Safeguarding Areas and Policies are identified in Chapter 6 - the use of minerals is generally beyond the scope of planning control - the release of minerals will be controlled by monitoring the permitted reserves of aggregate minerals and silica sands, and need the provision of information by the minerals industry.	- Mineral Planning Authorities, and Local Planning Authorities, in Bedford Borough Council and Central Bedfordshire Council - Mineral operators - The Local Highway Authorities and the Highways Agency, in respect of specifying materials to be used in road construction and repair.

4. To minimise adverse environmental and amenity impacts of mineral working and the associated transport of minerals, and to make use of opportunities to improve the environment and make other sustainability gains.

Action	Parties
the selection of Strategic mineral sites and the consideration of applications will consider the impacts on both amenity and various aspects of the environment.	Bedford Borough Council and Central Bedfordshire Council as Mineral Planning Authorities and Local Planning Authorities - The Minerals industry

Action	Parties
- the afteruse of mineral working sites has the scope to bring forward a wide range of benefits, such as increased habitats for wildlife, and new or improved rights of way for public access.	

5. To ensure that host communities derive tangible benefits from any mineral working undertaken in their area.

Action	Parties
- tangible benefits to communities include additional employment, and various potential gains from the afteruse of sites, discussed under 4 above.	- Bedford Borough Council and Central Bedfordshire Council as Mineral Planning Authorities - the minerals industry

6. To ensure that mineral sites, in operation and restoration, are sympathetic to their local landscape character (as determined via Landscape Character Assessment).

Action	Parties
proposals for new mineral working sites will be required to be designed taking into account the Landscape Character Assessment for the area	- Bedford Borough Council and Central Bedfordshire Council as Mineral Planning Authorities - the minerals industry

7. To ensure the appropriate restoration and after-use of mineral workings, taking particular account of potential contributions to the aims of Biodiversity Action Plans, Green Infrastructure Plans, Outdoor Access Improvement Plans, and River Basin Management Plans.

Action	Parties
- planning conditions will be attached to new mineral working permissions, and will be actively monitored, to ensure that mineral workings are appropriately restored - proposals for the restoration of mineral workings will be considered with respect to the aims of Biodiversity Action Plans, Green Infrastructure Plans, Outdoor Access Improvement Plans, and River Basin Management Plans, so as to achieve their respective objectives. - restoration schemes will provide for the creation of new habitats for species identified in the Bedfordshire & Luton Biodiversity Action Plan.	- Bedford Borough Council and Central Bedfordshire Council as Mineral Planning Authorities - the Minerals Industry

Risks and contingencies in delivering the Minerals Strategy.

Sterilisation of Preferred site

6.8 The sand and gravel sites have been selected so that they form extensions to existing sites or act as a satellite site utilising an existing plant site. If, for any reason, extraction of these areas does not commence within a reasonable period after the mineral from the main quarry has been extracted there may be pressure to dismantle the plant site and restore the land. If this occurs then it may not be possible to extract these areas as they would be isolated and incapable of extraction without the benefit of the proximity of the main quarry and plant site. This would result in the sterilisation of the mineral. For example although the Bedford Valley Park and rowing lake can be progressed so that the mineral sites identified in the area can still be worked, there is always the possibility, especially if mineral extraction is delayed for a lengthy period, that this could prejudice the completion of the Preferred Areas.

6.9 There may be pressure for other uses or development to take place on the land identified for extraction. If this is the case it is anticipated that an assessment of the mineral at the site would be undertaken and that there would be prior extraction of the mineral or that it could be used in the development. However, this may not happen in practice.

Less reserves than anticipated

6.10 The Strategic mineral sites allocated have been identified on the basis of information provided by mineral companies following their assessment of the likely reserves at the sites in question. However, it is possible that when further detailed surveys are undertaken prior to extraction that the reserve is actually less than currently anticipated by the operator or that when the site is worked that the depth of overburden or of the reserves makes parts of a site uneconomic to work. In such instances the amount of mineral available for extraction may be found to be less than previously expected.

Quality of reserve

6.11 When a site is worked the mineral may prove to be of a lesser quality than previously expected in all or part of the site. As a consequence it may then be economically less attractive to extract.

Development	Nature of Risk	Degree of Risk	Responsible person/organisation	Possible means of mitigating risk
Sterilisation of mineral site as a result of delay	That the plant is no longer available to be utilised for processing the mineral, due to delay in a Preferred Site coming forward	Small/medium	-Minerals Operator - Mineral Planning Authority (MPA)	To ensure that permissions are in place to enable the plant site to be utilised on the parent site for the processing of mineral from the Preferred Area

Development	Nature of Risk	Degree of Risk	Responsible person/organisation	Possible means of mitigating risk
Sterilisation of reserve at Preferred Area as a result of development pressures	That the timing of extraction is such that it would delay other development proposed in the area	Small/medium	- Mineral Operator -MPA -Local authority, and other land owners	Ensure that permissions are in place in a timely manner and take into account known development proposals. That extraction is timed so as not to delay other development. Measures are put in place to ensure that extraction can be completed whilst facilitating other development proposals.
Reserve is less than anticipated	That less mineral is available from a site than initially assessed	Small/medium	- Mineral Operator - Landowners - MPA	Operators will have undertaken an assessment of the likely reserve before putting the site forward. Undertaken further detailed assessment of the mineral, depth of overburden etc is undertaken as part of the process of compiling the planning application
Quality of the reserve is less than anticipated	Inferior mineral on all or part of site	Small/medium	Operator	This assessment should have been made before the site was put forward as a Preferred Site. The operator may have to find alternative uses for some mineral found at the site to avoid its sterilisation.

Implementation and Delivery of the Minerals Strategy

Sand and Gravel

6.12 Sand and gravel workings are not widely distributed throughout the Plan area, especially as a result of its geology. Given the extent of permitted reserves at operational sites in the Plan area it is expected that this area will continue to produce sand and gravel aggregate from the active workings in the Valleys of the Rivers Ouse and Ivel east of Bedford during the early part of the Plan period. Existing permitted reserves at sites in this part of the Plan area will continue to supply construction materials to the areas of housing growth now being identified in development plans. Some of the identified Strategic sites in the Ouse Valley will continue to supply the processing plant at Willington, replacing existing permitted sites as they become exhausted.

Silica Sands

6.13 A small number of sites presently produce Silica sands for a range of uses. Most of these are in the Heath and Reach area near Leighton Buzzard. The level of output varies from site to site, and from year to year. In addition the nature of the mineral resource provides for the aggregate sands. Existing permitted reserves will not be sufficient at all of the sites to continue to supply Silica Sand throughout the Plan period, and a Strategic site for Silica Sand production is identified primarily to replace production from Pratts Pit south of Leighton Buzzard, which along with some other Silica Sand quarries in the area, which supply the processing plant at Double Arches Quarry.

Chalk

6.14 Chalk is worked for cement manufacture at Kensworth, and also for building stone at Totternhoe. There are extensive reserves at Kensworth quarry, sufficient for the plan period, and no Strategic sites have been identified to supply chalk for cement manufacture.

Building Stone

6.15 Totternhoe quarry produces a small amount of limestone (Totternhoe Stone) as building stone, with reserves sufficient for the Plan period. This is known colloquially as Clunch. In addition, Limestone is imported for use in the Upper Ouse Valley area of Bedford from Leicestershire and Lincolnshire. For a site to come forward within the Plan area it would need to prove a need for the mineral, that it was of sufficient quality, and establish that it was environmentally acceptable for it to be worked at that location.

Clay

6.16 There are substantial permitted reserves of clay in the Marston Vale following the cessation of brick manufacture in this area. However, proposals occasionally arise for clay extraction for use in engineering works. Such proposals will need to establish a need for working clay that does not have an existing permission, and be subject to the Waste Core Policies 6 and 7.

Mineral Core Policy	Indicator	Related Mineral Objective	Target
MCP1 The Provision of Aggregates	Number of years over which the level of permitted reserves will supply aggregate	1	A seven year landbank for sand/gravel during 100% of the Plan period
MCP 2 The production and supply of recycled/secondary aggregates to be used in preference to land won aggregates.	The amount of permissions granted for the supply of recycled/secondary aggregates in preference to land won aggregates.	3	100% of permissions for recycled/secondary aggregates production granted when the aggregates landbank was seven years or more.
MCP 3 Provision of Silica Sand	Additional reserves have only been released where there was an identifiable need which could not be met from existing sources.	1	100% of additional silica sand is released where a demonstrable need is identified which cannot be met from

Mineral Core Policy	Indicator	Related Mineral Objective	Target
			existing sites or alternative materials.
MCP 4 Overall Spatial Strategy for Minerals	The amount of new sites which are from those set out in MCP 3	2 and 4	100% of new mineral sites permitted will be those identified in MCP 3.
MCP 5 Mineral Extraction outside Allocated Sites	The number of applications for extraction outside Preferred Sites	4 and 6	Number of permissions for extraction outside Preferred areas
MCP 6 Rationalisation of reserves and restoration of old sites	The amount of new sites which are not those set out in MCP 2	4	100% of Old Mineral Permissions to be subject to modern schemes of conditions.
MCP 7 To identify how mineral sites and related development applications for will be determined.	Percentage of applications for mineral sites and related development determined according to relevant Waste Core Policies, taking into account the Strategic sites, and the Saved General and Environmental Policies.	1,2,4,5,6 and 7	100% of applications determined according to Waste Core Policies, and taking into account the Strategic sites, and the Saved General and Environmental Policies
MCP 8 Importation of materials for processing	The percentage of applications granted for processing mineral at remote sites	3	100% of applications for processing mineral at remote sites to be acceptable according to Policy MCP 8.
MCP 9 Borrow Pits	The percentage of applications permitted which satisfy the criteria in MCP 7	2 and 4	100% of applications for Borrowpits permitted satisfy the criteria set out in Policy MCP 9
MCP 10 Climate Change Minerals Development proposals, including operational practices and restoration proposals must take account of	The percentage of applications permitted for new or extended mineral workings which take account of climate change issues in their operational practices and restoration proposals	4 and 7	100% of applications for new or extended mineral workings will take account of climate change in their operational practices and restoration proposals

Mineral Core Policy	Indicator	Related Mineral Objective	Target
climate change for the lifetime of the development.			
<p>MCP 11</p> <p>Strategic Transport and protection of existing railhead facilities</p> <p>All new quarries or extensions to quarries will be required to conform to the adopted Freight Policies and /or Strategy of the Council for their area in respect of the management of traffic from the site.</p>	The percentage of applications permitted which take account of the adopted Freight Strategy for their area.	4	100% of applications for new or extended mineral workings will take account of the adopted Freight Strategy of the Council for their area in respect of the management of traffic from the site.
<p>MCP 12</p> <p>Mineral Resource Assessment</p>	The percentage of applications permitted which satisfy the criteria in MCP 8 and are accompanied by a Minerals Resource Assessment	3	100% of applications for non-minerals development on land within a designated Mineral Safeguarding Area required to be accompanied by a Mineral Resource Assessment
<p>MCP 13</p> <p>Surface development within a Mineral Safeguarding Area</p>	The percentage of applications permitted which satisfy the criteria in MCP 9 and are allowed to proceed if mineral is proven to be of poor quality or not present.	3	100% of applications for surface developments within a designated Mineral Safeguarding Area allowed to proceed if mineral is proven to be of poor quality, or not present

7 Glossary

A	
Aftercare	A period of five years following the replacement of soils (“restoration”) in which a former mineral working or landfill site is managed to bring about the agreed afteruse.
Afteruse	The use of former mineral working and landfill sites following the completion of mineral working, or landfilling.
Aggregates	Rock, sand, or gravel for use in construction as fill, plaster, mortar, or in making roadstone, concrete or cement.
Allowable Solutions	A project or scheme which will deliver verifiable carbon savings and meet additional national acceptance criteria. On-site, near-site and off-site projects may qualify for inclusion on Government and National lists.
Amenity	The enjoyment of a location. “Amenity land” is a range of afteruses including open space, nature conservation, or other forms of public access.
Anaerobic Digestion	The breakdown of organic material in the absence of air. It is a mature technology for sewage treatment and in other European countries it is used as a waste management method. It is carried out in an enclosed vessel and produces methane which powers an engine used to produce electricity. The useful outcomes of anaerobic digestion are electricity, heat and the solid material left over called the digestate. Both the heat and the electricity can be sold if there is a market and the digestate can be used after further treatment for agricultural purposes.
Apportionment	A share of the amount of either aggregate to be provided within a Regional Aggregate Working Party area, or the area of a Waste Technical Advisory Body.
Aquifer	A water bearing mineral within the ground. A water-bearing geological formation. Water may percolate along an aquifer, following the gradient of the stratum.
Area of Outstanding Natural Beauty	An area of landscape designated as having special protection in order to protect its landscape character.
B	
Biodegradable waste	Waste which will degrade or decompose, releasing environmental pollutants (sometimes known as putrescible waste). The Landfill Directive defines biodegradable waste as “any waste that is capable of undergoing anaerobic or aerobic decomposition” [Article 2(1)]
Biodegradable Municipal Waste	Component of municipal waste which is “biodegradable”.
Borrowpit	A temporary mineral working site intended to provide mineral for a specific construction project

Buffer Zone	An area that separates mineral workings and waste management facilities from adjacent areas so as to protect the quality of life for the occupants.
Bund	An embankment, or mound, formed of inert material, usually soil, used to screen a site from view.
C	
Capping	A covering layer of impervious material, often clay, at the top of a landfill to inhibit penetration by water into the waste the egress of landfill gas. The restoration topsoil and sub-soils are placed above the capping layer.
Cement	Substance made by roasting lime and clay - sets hard when mixed with water. May be used with sand to form a mortar or with sand and gravel to make concrete.
Civic Amenity Site	See household waste recycling centre
Clinical Waste	Waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar sources that may present risks of infection.
Combined Heat and Power (CHP)	A power generation process that utilises process heat in addition to generating electricity. Process heat may be used to heat water, which can be piped to local industry or domestic users. Waste materials may be used to fuel CHP schemes.
Commercial Waste	Waste from premises used mainly for trade, business, sport, recreation or entertainment, as defined under section 75 (7) of the Environmental Protection Act 1990.
Co- Disposal	The landfilling of hazardous and non-hazardous wastes together in such a way that benefit is derived from biodegradation processes to produce relatively non-hazardous products in the landfill mass.
Composting	The breakdown of organic matter by the action of micro-organisms into usable end-products. It is an important method of processing organic waste because it can reduce the amount of potentially polluting waste going to landfill or incineration.
Concrete	Mixture of gravel, sand, cement and water used for construction.
Concrete batching plant	Plant which produces ready mixed concrete for delivery to construction sites.
Controlled waste	Household, industrial, commercial and clinical waste, as defined under Section 75 of the Environmental Protection Act 1990. Controlled waste requires a waste management license for treatment, transfer or disposal. The main exempted categories comprise mine, quarry and farm wastes. Radioactive and explosive wastes are controlled by other legislation and procedures.
Construction waste (see also demolition waste)	Waste arising from any development such as vegetation and soils from land clearance. Masonry and rubble wastes arising from the demolition or construction of buildings or other civil engineering structures.
Crushed concrete	Concrete from demolition sites, crushed and reused as aggregate for construction

D	
Development Management	The sector of land-use planning that deals with the processing and enforcement of planning applications and decisions under the Town and Country Planning legislation.
Demolition waste	Masonry and rubble wastes arising from the demolition or reconstruction of buildings or other civil engineering structures.
Development Control	The sector of land-use planning that deals with the processing and enforcement of planning applications and decisions under the Town and Country Planning Legislation.
Development Plan	Statutory document which sets out the Local Planning Authorities policies and proposals for the use of land in its area.
Domestic Waste	Waste or refuse that arises from private houses and other domestic dwellings.
E	
Energy from Waste	A term covering a range of treatment processes that reclaim energy from a waste material feedstock. There are different techniques to recover the energy from waste, including combustion, gasification, pyrolysis, and biological processes, including anaerobic digestion and extraction of landfill gas. Other processes pelletise waste inputs for burning in a Refuse Derived Fuel (RDF) plant.
Environment Agency (EA)	Government body established in April 1996, combining the previous functions of the Waste Regulation Authorities, the National Rivers Authority and Her Majesty's Inspectorate of Pollution. The Agency is responsible for waste regulation and Integrated Pollution Prevention and Control (IPPC), and also has a key role in the provision of information about waste management, including data and technical information.
Environmental Impact Assessment (EIA)	The process by which the impact on the environment of a proposed development can be assessed. Certain waste/minerals proposals will require an Environmental Impact Assessment to be carried out. The Town and Country Planning (Environmental Impact Assessment) (England Wales) Regulations 1999 and the accompanying Department of the Environment Transport and the Regions Circular 02/99 sets out the circumstances when planning applications will be required to be accompanied by an Environmental Impact Assessment (EIA). The information contained in the EIA will be taken into account when the Councils determine such proposals.
Environmental Statement (ES)	The process by which the impact on the environment of a proposed development can be assessed. Certain waste/minerals proposals will require an Environmental Impact Assessment to be carried out. The Town and Country Planning (Environmental Impact Assessment) (England Wales) Regulations 1999 and the accompanying Department of the Environment Transport and the Regions Circular 02/99 sets out the circumstances when planning applications will be required to be accompanied by an Environmental Impact Assessment (EIA). The information contained in the EIA will be taken into account when the Councils determine such proposals.

Exempt Sites/Activities	Lower risk waste management activities such as some reclamation and recycling activities are usually not seen as a threat to the environment or human health. They are therefore, exempt from the need to obtain a Waste Management Licence. There are around 45 categories of exemption, most of which are subject to specific constraints on waste types, quantities, capacities and duration of storage. Most exempt activities need to be registered with the Environment Agency.
G	
Green Belt	An area of land, designated in a Development Plan, the primary purpose of which is to prevent urban sprawl by keeping land permanently open.
Groundwater	Water contained within soils and underground strata (aquifers) of various types across the country.
H	
Hazardous waste (See also special waste)	Hazardous wastes are defined in European legislation. In general terms they comprise wastes that if improperly handled, treated or disposed of carry the risk of death, injury or impairment of health to humans or animals, the pollution of waters, or could have an unacceptable environmental impact. Under EU legislation, wastes to be landfilled are now classified as “hazardous”, “non-hazardous” or “inert” in order to define different pollution potentials and handling requirements. The full definition and list of wastes may be viewed on the internet at http://europa.eu.int/eurlex/en/consleg/pdf/2000/en_2000D0532_do_001.pdf
Household Waste	Waste from a domestic property, caravan, and residential home or from premises forming part of a university or school or other educational establishment; premises forming part of a hospital or nursing home. (Environmental Protection Act 1990 – s.75 (5)).
Household Waste Recycling Centre (HWRC)	Sites operated by the Council to which the public may deliver non-business waste and at which a range of materials (e.g. metals, paper, glass, engine oil) is recovered for recycling. Formally known as “civic amenity sites” or, in Bedfordshire, “Tidy-tips”.
Hydrogeology	The study of the occurrence, movement and quality of water beneath the Earth's surface.
I	
Incineration	Controlled burning of waste, either to reduce its volume or its toxicity. Energy can be recovered by utilising the calorific value of paper, plastic etc to produce heat and/or power.
Industrial Sands	Sands with particular properties, which are not sold for aggregate use. These sands supply a wide range of more specialist uses in the following industries including: <ul style="list-style-type: none"> • Foundry Industry

	<ul style="list-style-type: none"> • Glass Industry • Horticultural Industry • Filtration Industry
Industrial Waste	Waste from any of the following premises: factory; provision of transport services (land, water and air); purpose of connection of the supply of gas, water, electricity, provision of sewerage services, provision of postal or telecommunication services (Environmental Protection Act 1990).
Inert Waste	Waste which will not biodegrade or decompose (or will only do so at a very slow rate). Types of materials include uncontaminated topsoil; subsoil; clay; sand; brickwork; stone; silica; and glass.
Infilling development	Development which fills a restricted gap in the continuity of existing buildings where the site has existing buildings adjoining on at least two sides.
Interim Development Order	A mineral permission granted after 21 July 1943 and before 1 July 1948, which has been preserved by successive Planning Acts as a valid permission in respect of development which has not been carried out by 1st July 1948.
L	
Landbank	The quantity of mineral remaining to be worked at sites with planning permission for mineral working – usually expressed as the number of years of remaining supply.
Landfill	The controlled deposition of waste onto land, usually below the level of the surrounding land or original ground level, in such a way that pollution or harm to the environment is prevented. Former mineral workings are often used for this purpose.
Landfill Gas	A by-product from the digestion by anaerobic bacteria (rotting) of putrescible matter present in waste deposited on landfilled sites. The gas is predominantly methane (65 per cent) together with carbon dioxide (35 per cent) and trace concentrations of a range of other vapours and gases.
Landraising	Deposition of waste above the level of the surrounding land or the original ground level. It is usually deposited onto unworked ground or onto land previously filled to the original ground level. The deposit of waste in a former mineral working normally requires a degree of “doming” above surrounding ground levels in order to ensure adequate control of surface water run-off – this is not generally counted as landraising.
Landspreading	The application of solid wastes, sludges and liquid wastes to the land without the removal of the topsoil layer. Landspreading is a common means for disposal of treated sewage sludge and agricultural wastes.
Land-won aggregates	Virgin aggregates dug from the land (used to differentiate between these materials and recycled and marine-dredged aggregates)

Leachate	A liquid generated in landfill sites from the inherent moisture of present in the waste and/or arises through decomposition. Older landfill sites may not be sealed, and leachate may be generated through the ingress of rain or groundwater.
M	
Materials Recovery Facility (MRF)	A building for recycling or recovery of waste materials for recycling. Recovery processes may include manual and/or automatic sorting.
Metal Recovery Site	Recovery and bulking up facilities that concentrate on recovering metals as high quality input to industry. Facilities include traditional scrap yards and car breakers.
Mineral Consultation Areas	Area which contains known mineral deposits within which the district councils should consult the county council on any development proposals which could sterilise possible future mineral working.
Municipal Solid Waste (MSW)	Waste which is collected and disposed of by or on behalf of a local authority. It will generally consist of household waste, some commercial waste and waste taken to civic amenity waste collection/disposal sites by the general public. In addition, it may include road and pavement sweepings, gully emptying wastes, and some construction and demolition waste arising from local authority activities.
N	
Non- hazardous waste	Waste that is not classified as hazardous under European legislation (see hazardous waste). In general terms, non hazardous waste comprises “normal” wastes such as domestic refuse.
Non-inert waste	A term previously used to define waste which is biodegradable, but does not pose particular handling problems – broadly equivalent to the new “non-hazardous” classification under EU legislation.
O	
Overburden	Material (Soil, clay or rock) which must be removed before extracting the mineral deposit beneath it.
P	
Permitted Reserves	Mineral Deposits that have planning permission for extraction.
Primary Aggregates	Naturally occurring aggregate minerals, including sands, gravels and rocks but excluding reused/recycled materials or the waste materials of other processes that are capable of being used for aggregate purposes (secondary aggregates).
Primary Minerals	Virgin minerals (i.e. not recycled or produced as a by-product of other processes)
Production Site	Individual extraction or plant site processing original material at which there is a need to maintain a landbank of permitted reserves in accordance with mineral planning guidance. For silica sands sites this is “at least” 10 years to accord with MPG15.

Proximity Principle	Waste should be managed/ disposed of close to the point at which it is generated. This creates a more responsible and hence sustainable approach to the generation of wastes, and also limits pollution / congestion from transport.
Public Rights of Way	Footpaths, bridleways, tracks and lanes used as public paths and public byways.
Putrescible Waste	Waste readily able to be decomposed by bacterial action. Landfill gas and leachate can occur as by-products of decomposition.
Pyrolysis	In pyrolysis, thermal decomposition takes place in the absence of oxygen. The energy efficiency of this process can be high but operational and high capital costs currently limit its economic viability
R	
Rail Served Aggregates Depot	Reception point for aggregates transported by train.
Ramsar Sites	Sites of international importance to birds which inhabit wetlands. Ramsar is the name of the place where the Wetlands Convention was signed.
Reclamation	Process of returning a site or area to its former or other appropriate future use following mineral extraction/waste disposal.
Recovery	A range of waste management operations as set out in the the Waste Framework Directive 2008/98/EC. They include composting, recycling, anaerobic digestion, gasification, pyrolysis, and energy recovery.
Recycling	The collection and separation of materials from waste and subsequent processing to produce new marketable products.
Reduction	Use of technology creating less waste generation from production , or production of longer lasting products with lower waste generation potential, or Removing material from the waste stream, i.e. green waste used in home composts.
Re-Use	Can occur within a company, or by moving waste for re-use elsewhere. Some companies have introduced re-usable packaging, such as “tote” boxes for products. This avoids the need for cardboard and polystyrene packaging every time raw materials are delivered. Standardisation of pallets for example can help companies to re-use more of their packaging. Other products such as solvents can be re-used within a company by installing recirculation systems or distillation units.
S	
Scrapyards	See Metal Recovery
Secondary Aggregates	Minerals that are produced as a by-product of another operation or process and can be used for aggregate purposes.
Sites of Special Scientific Interest (SSSIs)	These sites are notified under Section 28 of the Wildlife and Countryside Act 1981 by Natural England whose responsibility is to protect these areas. They are important areas for nature conservation, i.e. valuable for flora, fauna or geological strata. Natural England must to be notified of planning proposals in

	or adjacent to SSSIs. National Nature Reserves (NNRs), terrestrial RAMSAR sites, Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) are also SSSIs under national legislation.
T	
Tonnes	Metric tonnes. One tonne weighs a little less than one imperial ton. (1 tonne ~ 1000kg)
Transfer Points	Locations where either MSW or C&I wastes are bulked up for movement on to other waste management facilities or other re-using industries.
Transfer Stations	Receive wastes which are then bulked up and transported for disposal or recovery. Some transfer stations include a materials recovery facility to sort out the recoverable wastes prior to disposal of the bulk waste.
V	
Void (Space)	The hole (volume) created by mineral working with potential for landfilling with waste.
W	
Waste Hierarchy	<p>A conceptual framework to guide determination of the Best Practical Environmental Option for management of wastes. Sets out a general order of preference:</p> <ol style="list-style-type: none"> 1. prevention 2. preparing for re-use 3. recycling/composting 4. energy recovery 5. disposal. <p>The hierarchy is not intended to be prescriptive, and in some cases the best practical environmental option may be one of the lower order options.</p>
Waste minimisation	Avoidance of waste generation – for e.g. the reduction of unwanted outputs from the manufacturing process and the manufacture of products that are likely to result in less waste when they are used.
Waste management licence	Licence granted by the Environment Agency authorising treatment, keeping or disposal of any specified description of controlled waste in or on specified land by means of specified plant.
Waste Reduction	To make waste production and waste management practices more sustainable, key objectives are to reduce the amount of waste that is produced, make the best use of waste produced and choose practices which minimise the risks of pollution and harm to human health. Waste reduction is concerned with reducing the quantity of solid waste that is produced and reducing the degree of hazard represented by such waste.