
Bedfordshire and Luton Minerals and Waste Local Plan

First Review:
Adopted January
2005

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This is the Bedfordshire and Luton Minerals and Waste Local Plan (1st Review) Adopted 2005. This document sets out the detailed land use policies and proposals for the extraction of minerals and management of waste in Bedfordshire and Luton for the period 2000 - 2015 (inclusive).

This document can be made available in a range of languages, large print, Braille, on tape, electronic and accessible formats from; Bedfordshire County Council, Minerals and Waste Planning Team on 01234 363222 or Luton Borough Council, Local Plans Team on 01582 546315.

Ky eshte Plani Lokal i Bedfordshire dhe Luton per Minerale dhe Mbeturina (rishqyrtimi i pare) i bere 2005. Ky dokument shpall ligjet per perdorimin e hollesishem te tokes dhe propozimet per nxerjen e mineraleve dhe suksesin ne kontrollimin e mbeturinave ne Luton dhe Bedfordshire per periudhen 2000 – 2015 (e perfshire).

Ky dokument mund te jene ne dispozicion ne gjuhe te ndryshme, me shkronja te medha, Braille (gjuhen e te verberve), ne kasete, elektronike dhe formate te perdorshme nga; Bedfordshire County Council, Grupi per planifikim per Minerale dhe Mbeturina ne 01234 363222 ose Luton Borough Council, Grupi per Plane Lokale ne 01582 546 315.

Questo è il progetto locale Minerali e Rifiuti del Bedfordshire e di Luton (prima revisione), adottato nel 2005. Questo documento espone in maniera dettagliata le linee di condotta per l'utilizzo del territorio e le proposte riguardanti l'estrazione dei minerali e la gestione dei rifiuti nel Bedfordshire e a Luton per il periodo che va dal 2000 al 2015 compreso.

È possibile ottenere questo documento in varie lingue, in grandi caratteri, in Braille, su nastro, e in vari formati elettronici accessibili contattando: Bedfordshire County Council, Minerals and Waste Planning Team, tel. 01234 363222, oppure Luton Borough Council, Local Plans Team, tel. 01582 546315.

ਇਹ ਬੈਂਡਰਡਸਾਇਰ ਅਤੇ ਲੂਟਨ ਦੀ 'ਮਿਨਰਲਜ਼ ਅਤੇ ਵੇਸਟ ਡਿਵੈਲਪਮੈਂਟ ਪਲਾਨ' ਹੈ। ਇਹ ਅਥਾਰਿਟੀਆਂ ਦੀ ਪ੍ਰਾਜੈਕਟ ਪਲੈਨ ਹੈ ਅਤੇ 'ਮਿਨਰਲਜ਼ ਐਂਡ ਵੇਸਟ ਡਿਵੈਲਪਮੈਂਟ ਪਲਾਨ' ਦੇ ਢਾਂਚੇ ਵਿਚ ਸ਼ਾਮਲ ਸਾਰੇ ਕਾਰਜ-ਪੱਤਰਾਂ ਤਿਆਰ ਕਰਨ ਦਾ ਪ੍ਰੋਗਰਾਮ ਹੈ। ਇਸ ਢਾਂਚੇ ਵਿਚ 'ਮਿਨਰਲਜ਼ ਐਂਡ ਵੇਸਟ ਡਿਵੈਲਪਮੈਂਟ ਪਲੈਨ' ਦੇ ਕਈ ਕਾਰਜ-ਪੱਤਰ ਸ਼ਾਮਲ ਹਨ ਅਤੇ ਇਹ ਮਿਲ ਕੇ ਬੈਂਡਰਡਸਾਇਰ ਅਤੇ ਲੂਟਨ ਵਿਚ ਖਣਿਜ ਪਦਾਰਥਾਂ ਨੂੰ ਕੱਢਣ ਅਤੇ ਕੂੜੇ-ਕਰਕਟ ਦੇ ਪ੍ਰਬੰਧ ਲਈ ਜ਼ਮੀਨ ਦੀ ਵਰਤੋਂ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ ਨੀਤੀਆਂ ਅਤੇ ਤਜਵੀਜ਼ਾਂ ਨੂੰ ਸਥਾਪਤ ਕਰਦੇ ਹਨ।

ਬੈਂਡਰਡਸਾਇਰ ਕਾਊਂਟੀ ਕੌਂਸਲ, ਮਿਨਰਲਜ਼ ਐਂਡ ਵੇਸਟ ਪਲੈਨਿੰਗ ਟੀਮ ਨੂੰ 01234 363222 'ਤੇ ਫੋਨ ਕਰਕੇ ਜਾਂ ਲੂਟਨ ਬਾਰੋ ਕੌਂਸਲ ਦੀ ਲੋਕਲ ਪਲੈਨਿੰਗ ਟੀਮ ਨੂੰ 01582 546315 'ਤੇ ਫੋਨ ਕਰਕੇ ਇਹ ਪਰਚਾ ਵੱਖ ਵੱਖ ਬੋਲੀਆਂ, ਵੱਡੇ ਅੱਖਰਾਂ, ਬਰੇਲ, ਟੇਪ 'ਤੇ, ਈਮੇਲ ਰਾਹੀਂ ਜਾਂ ਹੋਰ ਪਹੁੰਚਯੋਗ ਸਕਲਾ ਵਿਚ ਹਾਸਲ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।

এটা হলো বেডফোর্ডশায়ার ও লুটন 'মিনারেলস্ অ্যান্ড ওয়েস্ট লোক্যাল প্ল্যান' বা খনিজ ও বর্জ্য পদার্থ-সংক্রান্ত স্থানীয় পরিকল্পনা (১ম পর্যালোচনা), ২০০৫ সালে গৃহীত। ২০০০ - ২০১৫ (উভয় সালকে ধরে) সময়সীমার মধ্যে বেডফোর্ডশায়ার ও লুটন এলাকায় খনিজ পদার্থ নিষ্কাশন ও বর্জ্য পদার্থ ব্যবস্থাপনার জন্য ভূমি ব্যবহার-সংক্রান্ত বিস্তারিত নীতিমালা ও প্রস্তাবসমূহ এই দলিলে বর্ণনা করা হয়েছে।

এই দলিল বিভিন্ন ভাষায়, বড় হরফে ছাপা, ব্রেইল বা অক্ষলিপি, টেপ-এ ধারণ করা, বৈদ্যুতিন এবং অন্যান্য সহজে ব্যবহারের উপযোগী সংস্করণে পাওয়া যায় এই দুই জায়গা থেকে : বেডফোর্ডশায়ার সিটি কাউন্সিল, মিনারেলস্ অ্যান্ড ওয়েস্ট প্ল্যানিং টীম, টেলিফোন নম্বর 01234 363222 অথবা লুটন বারা কাউন্সিল, লোক্যাল প্ল্যানস্ টীম, টেলিফোন নম্বর 01582 546315.

આ બેડફર્ડશાયર (Bedfordshire) એન્ડ લ્યુટન (Luton) મિનરલ્સ એન્ડ વેઈસ્ટ લોકલ પ્લાન (પ્રથમ સમીક્ષા (રિવ્યુ)) કે જે 2005 માં પ્રકાશ કે સ્વીકારવામાં આવેલ છે. આ દસ્તાવેજ જમીનના ઉપયોગની વિગતવાર નીતિઓ અને ખનિજ કાઢવાની જોગવાઈ- વ્યવસ્થા અને 2000 - 2015 ના (સમાવિષ્ટ સાથે) સમય ગાળા માટે બેડફર્ડશાયર અને લ્યુટનમાં બગાડની (વેઈસ્ટ) વ્યવસ્થા કે પ્રબંધ દર્શાવે છે.

આ દસ્તાવેજ શ્રેણીબદ્ધ ભાષાઓ, મોટા છાપેલા અક્ષરો, અંધલિપિ (બ્રેઈલ), ટેઈપ ઉપર, ઈલેક્ટ્રોનિક (વીજળીક) અને સુગમતાવાળી રચનાઓમાં મળી રહેશે: બેડફર્ડશાયર કાઉન્ટિ કાઉન્સિલ (Bedfordshire County Council), મિનરલ્સ એન્ડ વેઈસ્ટ પ્લાનિંગ ટીમમાં 01234 363222 ઉપરથી અથવા લ્યુટન (Luton) બેરો કાઉન્સિલ, લોકલ પ્લાન્સ ટીમ 01582 546315 ઉપરથી.

یہ بیڈفورڈشائر اور لوٹن کیلئے میئرٹز اینڈ ویسٹ لوکل پلان (معدنیات اور فالتو اشیاء کے متعلق مقامی منصوبہ) ہے اور اس کا پہلا نظر ثانی جائزہ 2005 کیا گیا۔
یہ دستاویز زمین (جگہ) کے استعمال کی تفصیلی پلانیشنوں کے بارے ہے اور لوٹن اور بیڈفورڈشائر کے علاقوں میں معدنیات نکالنے اور فالتو اشیاء کے انتظام کے بارے میں (بشمول) سال برائے 2000 - 2015 سے متعلق ہے۔

یہ دستاویز آپ کو بہت سی زبانوں میں ترجمے کے ساتھ، بڑے حروف میں، بریل (ناہینا لوگوں کے لئے ابھری ہوئی لکھائی) میں، آواز کی صورت میں ٹیپ پر، ایمیل کے ذریعے، اور دوسری صورت/ساخت میں بیڈفورڈشائر کوئی کونسل کی میئرٹز اینڈ ویسٹ پلاننگ ٹیم سے اس نمبر 01234 363222 پر دستیاب ہے یا آپ لوٹن ٹراکٹولس کی لوکل پلاننگ ٹیم سے اس نمبر 01582 546315 پر فون کر کے حاصل کر سکتے ہیں۔

To jest Bedfordshire and Luton Minerals and Waste Local Plan [Plan lokalny o wydobywaniu minerałów i pozbycia się odpadów] (1sza rewizja) uzgodniona 2005r. Ten dokument podaje szczegółowe sprawozdanie o użytku ziemi i propozycje o wydobywaniu minerałów i pozbycia się odpadów w Bedfordshire i Luton od 2000r do 2015r (włącznie).

Można otrzymać ten dokument we wielu językach, w dużym druku, w Braille'u, nagrane na taśmę i w formie elektronicznej i przystępnym od Bedfordshire County Council, Minerals and Waste Planning Team pod numer 01234 363222 lub Luton Borough Council, Local Plans Team pod numer 01582 546315.

Table of Contents

	Introduction	9
	1.2 Statutory Framework.....	9
	1.3 National and Regional Planning Policy Framework	10
	1.4 Functions of the Minerals and Waste Local Plan.....	11
	1.5 Procedure and Publicity	13
	1.6 Sustainability Appraisal	14
2	Minerals: Extraction Strategy	15
2.1	Minerals extraction strategy	15
3	Minerals: Context.....	17
3.1	Sand and Gravel for Aggregates.....	17
3.2	Industrial Sands	18
3.3	Brickclay	18
3.4	Chalk	19
3.5	Fuller's Earth.....	19
3.6	Building Stone.....	20
3.7	Aggregate Recycling.....	20
4	Minerals: Policies.....	21
4.1	Aggregates Landbank.....	21
4.2	Silica Sand Landbanks.....	22
4.3	Protection of Mineral Resources / Mineral Consultation Areas	23
4.4	Rationalisation of reserves and restoration of old sites.....	24
4.5	Requirements for determination of minerals applications	26
4.6	Importation of materials for processing	27
4.7	Borrow Pits	28
4.8	Rail aggregates depots	29
5	Waste strategy.....	31
5.1	Background.....	31
5.2	Key Principles	32
	Applying the strategy: Projected requirements for non-inert wastes.....	35
5.3	Imported Wastes.....	35
5.4	Local Wastes	38
5.5	Implementing the strategy: provisions for future management of waste	45
5.6	Waste minimisation and management of wastes at source	45
5.7	Integrated Waste Management	51
5.8	Non-inert Waste Transfer and Recovery of Materials	54
5.9	Household Waste Recycling Centres (HWRCs).....	58
5.10	Composting.....	59
5.11	Anaerobic Digestion.....	62
5.12	Energy Recovery Plant	63
5.13	Non-inert Landfill.....	66
5.14	Pre-landfill treatments for biodegradable waste	69
5.15	Landfill Gas.....	70
5.16	Landraising	70
5.17	Sewage Treatment Works and Management of Sewage Sludge.....	71
5.18	Clinical Waste	72
5.19	Inert wastes	73
5.20	Safeguarding of waste management sites.....	74
6	General and Environmental Policies	75
6.1	Matters to be addressed in planning applications.....	75
6.2	Restoration / improvement of Marston Vale	78
6.3	Environmental Improvement of the Greensand Trust area	79
6.4	Environmental improvement of the Ivel and Ouse Valleys.....	80

6.5	Protection of Green Belt land	81
6.6	Protection of Best and Most Versatile agricultural land.....	82
6.7	Protection of Chilterns AONB.....	83
6.8	Protection of AGLV land.....	85
6.9	Landscape protection and Landscaping	86
6.10	Protection / enhancement of trees and woodland.....	87
6.11	Protection of sites of national nature conservation importance....	88
6.12	Protection of locally designated sites	89
6.13	Species and Habitat Protection and Enhancement	90
6.14	Archaeology	92
6.15	Historic Buildings and the Historic Environment	93
6.16	Pollution control	94
6.17	Disturbance.....	95
6.18	Flooding	96
6.19	Water resources.....	96
6.20	Public Rights of Way.....	97
6.21	Transport: alternative means.....	98
6.22	Transport: suitability of local road network	99
6.23	Ancillary minerals and waste developments.....	100
6.24	Buffer zones.....	100
6.25	Restoration	102
6.26	Aftercare	103
6.27	Monitoring and Review.....	103
7	Proposals map.....	105
8	Appendices.....	107
	Appendix 1: List of Main Current Guidance and Legislation.....	109
	Appendix 2: List of Acronyms and Abbreviations	115
	Appendix 3: Glossary	117
	Appendix 4: Forest of the Marston Vale Aims and Objectives.....	127
	Appendix 5: Greensand Trust Aim and Objectives	128
	Appendix 6: Ivel and Ouse Countryside Project.....	129

Introduction

- 1.1.1 The Minerals and Waste Local Plan is a statutory local plan prepared in accordance with the Town and Country Planning Act 1990. It sets the detailed landuse policy framework for the extraction of minerals and management of waste. Government guidance states that plans of this type should be reviewed at least once every five years.
- 1.1.2 This document is the first review of the Bedfordshire and Luton Minerals and Waste Local Plan (MWLP). The previous Plan covered the period 1996-2006, and the administrative areas of Bedfordshire County Council and Luton Borough Council. The review is a complete replacement Minerals and Waste Local Plan. It covers the same administrative area as the 1996 Plan, and covers the period 2000 – 2015 (inclusive).
- 1.1.3 Whilst the whole plan has been reviewed, the policies covering waste management have been subject to the most significant changes. This reflects recent and rapid shifts in National and European waste policy. The revised MWLP takes full account of these developments, and aims to promote the shift away from waste disposal towards more sustainable management based on waste minimisation and resource recovery.
- 1.1.4 Policies for minerals development have also been thoroughly reviewed, but little change has been required from the approach of the 1996 MWLP. The main modification is the removal of the previously identified preferred extraction areas, as these have now been brought into operation.

1.2 Statutory Framework

- 1.2.1 Local Government in Bedfordshire is administered via the two-tier County / District model, whilst Luton Borough is a Unitary Authority. Under the provisions of the Town and Country Planning Act 1990, Bedfordshire County Council and Luton Borough Council act as Minerals and Waste Planning Authorities, and are responsible for all mineral and waste planning matters throughout Bedfordshire and Luton. This includes the processing of planning applications for minerals, waste and associated development, together with the production of Minerals and Waste Local Plans. The County Council and Luton Borough Council are also responsible for disposal of municipal waste and the County Council is also tasked with the production of a municipal waste management strategy. Luton Borough Council, as a unitary authority, is also responsible for waste collection, whilst in Bedfordshire this function is undertaken by the District Authorities. Waste management activities are also subject to environmental regulations, which are administered by the Environment Agency.
- 1.2.2 In order to co-ordinate waste planning and management activities in the area, all Local Authorities have worked together to produce a Waste Strategy for Bedfordshire and Luton. This document, published in September 2001, provides an agreed over-arching policy framework for waste planning and management. The waste strategy transposes national and regional policy guidance to the local context, and was developed on the basis of extensive and interactive stakeholder participation. The agreed

framework of the Waste Strategy for Bedfordshire and Luton has been used as a foundation for the waste section of this review of the Minerals and Waste Local Plan. Further details are presented in the waste section of this Plan. The production of the Waste Strategy for Bedfordshire and Luton, together with forthcoming Municipal Waste Management Strategy for the County, will satisfy the statutory requirement for waste management and disposal plans.

- 1.2.3 The current Structure Plan, which was adopted in 1997, is the strategic policy document for the development of Bedfordshire and Luton up to 2011. The overriding objective of the Structure Plan is to improve the physical environment and quality of life for its residents. It also contains broad policies including the extraction, restoration and after use of mineral sites, and the management of waste. The policies form a framework that acts as a basis within which more detailed policies for minerals and waste can be evolved. The Structure Plan also contains policies relating to the environment, recreation and nature conservation which are relevant to the consideration of the areas proposed for mineral extraction, waste management and site restoration.
- 1.2.4 In terms of format, this MWLP comprises a Written Statement, which sets out the policies (typed in bold) together with a reasoned justification for them. A proposals map, presented in four sheets, identifies areas to which specified development control policies will apply. The Written Statement is presented in three sections; one covering minerals extraction, one covering waste management, and a third section covering common policies that are applicable to both minerals and waste developments.
- 1.2.5 The new development plan system introduced by the Government through the Planning and Compulsory Purchase Act 2004 is expected to provide a more streamlined process by which plans for minerals and waste will be prepared. The new Plans will be known as "Local Development Frameworks" (LDFs). The Government expects planning authorities to move to the new system of plan-making as soon as possible.
- 1.2.6 Local Development Frameworks will also be required to be in general conformity with the new Regional Spatial Strategies (RSSs), which will replace the current system of Regional Planning Guidance (RPG) and Structure Plans. The Regional Spatial Strategy for the East of England, RSS14, is currently under preparation, and once adopted, will provide the strategic planning framework for the area. This Plan will therefore be adopted as an interim measure, pending transition to the LDF system, in order to provide a broad framework for minerals and waste planning to meet the strategic aims of this Minerals and Waste Local Plan. The policies of this Plan will be reviewed in light of the final agreed RSS14, and site-specific plans for minerals and waste developments will be brought forward as a matter of urgency under the new system.

1.3 National and Regional Planning Policy Framework

- 1.3.1 National planning policy is presented in the Planning Policy Guidance Note (PPG) series, together with government Circulars. Specific minerals guidance is given in the Minerals Policy Guidance Note (MPG) series. There is no specific guidance note series for waste management, but

PPG10 (Planning and Waste Management) covers issues relating to implementation of the National Waste Strategy (Waste Strategy 2000). All local plans are expected to take account of national guidance, and this Plan incorporates all such guidance current at time of writing. Under the new Act PPG's and MPG's are to undergo review and be replaced by Planning Policy Statements (PPS) and Mineral Policy Statements (MPS). A full list of relevant guidance notes is included in the appendices.

- 1.3.2 The regional planning framework was changed in year 2001. Previously, Bedfordshire and Luton were included in the South-East England region, which was covered by SERPLAN (the South East Regional Planning Conference). Under the new arrangements, both Bedfordshire and Luton are part of the new East of England Region, which also includes Norfolk, Suffolk, Essex, Cambridgeshire and Hertfordshire, together with Thurrock and Peterborough Unitary Authorities. Planning guidance for the East of England will come from the East of England Regional Assembly (EERA). EERA will produce specific guidance for both minerals and waste, taking advice from the East England Regional Aggregates Working Party (EERAWP) and the Regional Waste Technical Advisory Body (RTAB).
- 1.3.3 At the time of writing, the East of England Regional Assembly is preparing a new Regional Spatial Strategy for the East of England (RSS14). It will replace the current RPG6 (East Anglia) and 9 (South East) to guide transport and planning in the East of England. Draft RSS14 was approved by the Regional Assembly on the 5th February 2004 and has been banked with the Secretary of State pending further work. Its anticipated adoption date is winter 2006.
- 1.3.4 The plan area is in a transitional phase as regards regional planning guidance. Until new regional policy documents are approved for the East England Region, the current guidance for the South East Region will apply for Bedfordshire and Luton. Specific current guidance of relevance includes RPG9 (Revised Regional Planning Guidance for the South East, published March 2001); the SERPLAN "Revised Waste Planning Advice: A Sustainable Waste Planning Strategy for the South East 1996-2006 (SERP160) and the East of England Regional Waste Management Strategy (EERWMS).
- 1.3.5 This draft MWLP has been drawn up to take account of the current regional guidance. Therefore, pending the adoption of RSS14, the SERP160 principles, as incorporated into the EERWMS, are generally adopted for the waste strategy of the plan. It should be noted, however, that this approach will need to be reviewed under the forthcoming transition to the LDF system in order to ensure that the replacement Minerals and Waste Development Framework (MWDF) is in conformity with RSS14.

1.4 Functions of the Minerals and Waste Local Plan

- 1.4.1 The main functions of the Plan are: -
 - To identify the need, amount and location for extraction for minerals of economic significance;

- To identify the need, nature, scale and location of waste management sites, and promote the shift to more sustainable waste management practice;
- To balance the allocation of these sites with the environmental and public amenity constraints in the County;
- To ensure sensible and prudent use of the mineral and waste resources in the County;
- To prevent sterilisation of these resources:
- To encourage reduction in use of raw materials and greater recovery of waste products;
- To minimise the effects of minerals extraction and waste management on the environment; and
- To seek enhanced public and environmental benefits when considering site restoration and after use;
- To identify and maintain landbanks for the supply of construction aggregates and other minerals as required by current Government guidance;
- To set out Development Control criteria to be applied when considering mineral and waste applications and restoration and aftercare proposals.

- 1.4.2 The minerals and waste planning authorities consider that the best way of striking the difficult balance between meeting the need for mineral and waste operations, minimising their impact and securing the best possible environmental benefits during and after operations, is to clearly identify the policy framework in advance, together with those areas where it is likely that operations will be given consent.
- 1.4.3 When reviewing the Plan under the new Local Development Framework system, the Minerals Planning Authority (MPA) will consult with the minerals industry to assess the appropriate split between building sand and gravel and concreting sand and gravel. From this a topic based site specific mineral plan will then be prepared to identify appropriate sites or preferred areas to meet any identified need.
- 1.4.4 With regards to waste, the Plan does not include site specific allocations, as the previous capacity projections on which the draft plan was based have now been revised, and will be subject to further review in light of the emerging RSS14. It instead presents criteria based policies to assist in the identification of sites pending the preparation of a site specific waste plan under the Local Development Framework format.
- 1.4.5 New waste management facilities will be needed in order to achieve the required shift away from landfill towards more sustainable management methods. At this time, although the general requirements may be identified, it is neither possible nor appropriate to be too specific as to the precise requirements for individual developments, as the industry is currently undergoing rapid evolution. This plan therefore adopts a criteria-based approach in planning for such facilities, with overall process capacity requirements identified, but with no specific preferred areas identified for development. This approach provides robust policy guidance, but avoids imposing unwarranted restrictions in the context of an evolving industry. The Councils recognise, however, that the identification of specific sites is the best way that the planning system can facilitate appropriate development.

We will therefore work as a matter of priority under the new LDF system to bring forward site allocation plans to support the strategic framework of this Plan.

- 1.4.6 Thus, the Local Plan provides detailed guidance, sets the policy framework for and reduces uncertainty for both the public and minerals and waste operators, on what proposals will be acceptable to the MPA / WPA. **The Plan should be read as a whole, and separate policies should not be read in isolation. Development proposals which may arise for mineral and waste operations may also be affected by other County Council policies which have not originated from Town and Country Planning legislation.** The policies apply to all minerals and waste development proposals which require any form of approval by the MPA / WPA such as applications for planning permission, approval of reserved matters or schemes and approvals for matters considered under the General Development Orders. Potential developers should be aware of these policies at the earliest possible stage. The topics addressed by this Plan are sometimes complex and every effort has been made to clarify these. However, the MPA / WPA will also encourage pre-application discussions with potential developers in order to ensure full mutual understanding of development proposals and their planning implications.
- 1.4.7 Luton Borough Council and the District Councils in Bedfordshire also prepare land-use plans which cover all other development not included in the Minerals and Waste Local Plan. The policies and proposals in these Plans are part of the overall development plan and are therefore important in terms of how they interact with those of this Plan. With regard to minerals and waste proposals, the identification of future land-uses in Borough and District Local Plans may in certain instances, have a direct bearing on the operation and after-use of the proposal.

1.5 Procedure and Publicity

- 1.5.1 This Plan is the first review of the 1996 Minerals and Waste Local Plan for Bedfordshire and Luton. To initiate formal consultation for the review, an Issues Report was published in July 2001. This document raised a number of mineral and waste related issues and sought the opinions of stakeholders. All representations were considered in the preparation of the first deposit draft Plan. The waste strategy, which has undergone the most fundamental change from the current plan, has also been subject to consultation and consensus-building undertaken during development of the Waste Strategy for Bedfordshire and Luton.
- 1.5.2 The first and second deposit drafts of the replacement MWLP have both been placed on deposit, each with public consultation periods of 6 weeks. Representations on the draft plans were received from a total of 87 organisations and individuals. Together, these representations included 585 objections, of which 94 were subsequently withdrawn or conditionally withdrawn and 176 expressions of support. Any outstanding objections were carried forward to the Public Inquiry and considered by the Inspector.
- 1.5.3 The Public Inquiry sat for 9 days between 25th November and 10th December 2003 and was formally closed on 9th January 2004. The Inspector has considered outstanding objections and the Planning Authorities' case

and presented the Planning Authorities with a report of recommendations. This was considered, and appropriate modifications were published for consultation between 1st August and 11th September 2004.

1.6 Sustainability Appraisal

- 1.6.1 Sustainable development is now firmly established as a key government policy. Planning Policy Guidance note 1 (PPG 1: General Policy and Principles) formally enshrines sustainable development as a central concern of the planning system, and the message is reinforced throughout the PPG series, including PPG 10 (Planning and Waste Management). Specific guidance on the implications of sustainable development for minerals is given in Minerals Policy Guidance note 1 (MPG 1: General Considerations and the Planning System). This Plan has been drafted in light of this guidance, and therefore takes the furtherance of sustainable development as the key foundation of policy.
- 1.6.2 Government guidance (PPG 12: Development Plans) requires all plans to be subject to formal environmental appraisal. This requirement will be expanded for the next Plan review to cover full sustainability appraisal including assessment of environmental, social and economic impacts.
- 1.6.3 The waste strategy of this draft plan is based on the policy framework established in Waste Strategy for Bedfordshire and Luton. This strategy has already been subject to a sustainability appraisal, which was conducted as an integral element of strategy formulation, and included assessment based on the Environment Agency "Wisard" life cycle analysis tool, together with stakeholder input.
- 1.6.4 An independent sustainability appraisal was carried out on the First and Second Deposit Drafts of this Plan, the results of which are available as a separate report.

2 MINERALS: EXTRACTION STRATEGY

2.1 Minerals extraction strategy

Policy number	Topic
M 1.—	Minerals extraction strategy
The MPA will not support proposals for new mineral extraction sites in this plan period, except where they confer an overall planning benefit (e.g. environmental improvement, restoration of old sites, rationalisation of reserves, borrow pits). This policy will not apply to concreting sand and gravel or silica sand so far as there is a need to meet the landbank requirements of Policies M2 and M3 respectively.	

- ~~2.1.1—Minerals are important resources which can only be extracted where they are found. Bedfordshire has significant economic deposits of certain minerals, with concentrations of reserves located in particular geographical areas; building sand and industrial sands around Leighton Buzzard, Heath and Reach, Sandy and Potton; sand and gravel along the river valleys of the Ouse and the Ivel; clay in the Marston Vale; chalk in the Chiltern Hills; and fuller's earth at Aspley Guise / Aspley Heath. To date, considerable areas of land have been disturbed for extraction and, in some cases, subsequent landfill has taken place. Significant areas lie unrestored, whilst others have been fully restored to agriculture, amenity or some alternative use. Large areas with planning consents, some of them decades old, remain to be worked for clay, chalk and soft sand.~~
- ~~2.1.2—The continuing exploitation of minerals at previous rates of extraction is not considered to be sustainable. Extraction can have significant environmental and social costs and disbenefits, which can be irreversible, whilst mineral resources themselves are non-renewable and must therefore be exploited as efficiently as possible, with an emphasis on their conservation for future availability. The way in which the need for the mineral is assessed and how demand is met must take into account the environmental and social costs, together with the long term husbandry of mineral resources.~~
- ~~2.1.3—Government guidance in PPG1 advises that where a proposal is submitted and it is not contrary to the development plan, where no demonstrable harm would be caused to any interest of acknowledged importance and subject to other considerations such as need, which may be material, it should normally be approved. However, except for concreting sand and gravel and silica sand, there is no foreseen need to permit any additional release of reserves in order to satisfy landbank requirements and anticipated market demand. Therefore, given the need to conserve mineral resources and minimise environmental disturbance, there will be a presumption against allowing further extraction (other than for concreting sand and gravel and silica sand) in this Plan period. In the case of fuller's earth, the County Council considers that, due the adverse environmental impacts that would result if further extraction were to be permitted, there is insufficient need for the mineral to justify the identification of sites for the winning and working of this mineral.~~

- ~~2.1.4 — However, some marginal flexibility is retained in the minerals extraction strategy in order to make allowances for circumstances in which a proposed mineral working may generate an overall planning benefit in its own right, irrespective of issues of need. Any such benefit will be assessed in accordance with the factors listed in policy GE1, together with any other material considerations. The County Council supports Government policy in relation to sustainable development generally and specifically in relation to mineral extraction, and a central consideration in the assessment of net benefit will therefore be the need for sustainable management and conservation of non-renewable mineral resources. Thus, in assessing any claimed planning benefit, the planning authority will take as a starting point the current levels of reserves with benefit of planning permission, together with the identified need and any landbank requirements for the mineral in question. Permission for mineral extraction will only be granted where the scale of the perceived planning benefit is sufficient to justify release of the additional mineral reserve. In effect, this approach gives a sliding scale: the greater the existing landbank provision, and the greater the scale of the proposed mineral extraction, the greater the claimed planning benefit will need to be in order to justify release of reserves. This flexible approach will also assist in overcoming any unforeseen changes in landbanks and future demand assessments, acting as a form of safety margin.~~
- ~~2.1.5 — In cases where a need is identified for the release of further mineral reserves, extensions to existing minerals workings may be preferable to the opening up of new sites as a means of minimising environmental disturbance, especially where there is an existing processing plant which can continue in use. However, this may not be appropriate for all existing mineral workings and it may do less environmental harm in some cases to open a new mineral working rather than to grant planning permission for an extension at an existing site.~~

3 MINERALS: CONTEXT

3.1 *Sand and Gravel for Aggregates*

- 3.1.1 The term 'sand and gravel' can be used to cover many types of minerals which are used for a wide variety of end products. This section is devoted to sand and gravel used for the production of construction aggregates, which is the major mineral group in terms of tonnage produced from Bedfordshire each year.
- 3.1.2 The responsibility for the preparation of national guidelines on aggregate provision rests with central Government. An important feature of aggregates planning since the early 1970's has been the work of the Regional Aggregate Working Parties (RAWPs) in the preparation of regional guidelines for the provision of aggregates in England and Wales. The RAWPs draw their membership from the Mineral Planning Authorities (MPA's), the minerals industry and central government and provide valuable technical information and advice. A National Co-ordinating Group (NCG) guides the work of the RAWPs. This is chaired by the relevant Government department and includes senior representatives of industry and local government.
- 3.1.3 Specific central government guidance for the provision of aggregate minerals is contained within Minerals Planning Guidance Note 6 (MPG 6), which was revised in June 2003 to cover the period 2001-2016. Advice given nationally and regionally provides guidance as to what needs to be done to ensure that the construction industry continues to receive an adequate and steady supply of minerals at the best balance of social, environmental and economic cost.
- 3.1.4 Bedfordshire and Luton are part of the new East of England Planning Region. Information on regional aggregates demand and consumption is collected by the East of England Aggregates Working Party (EERAWP), in which Bedfordshire County Council plays an active role. EERAWP provides advice to the East of England Regional Assembly (the Regional Planning Body), which determines regional guidance for aggregates planning. The County Council will continue to play a full and active part in the preparation of new regional guidelines and will liaise closely with the East of England Aggregates Working Party. Although contributing to demand, Luton is not an active minerals producing area. Luton Borough Council works therefore closely with the County Council on minerals issues.
- 3.1.5 Under the revised MPG 6 and the allied sub-regional apportionment, Bedfordshire is now expected to contribute 1.93 million tonnes of sand and gravel each year until 2016. Supply forecasts and apportionments do not represent Government targets or precise yearly quotas for production that must be met by the minerals industry. However, they do provide a useful planning tool which is used in the preparation of local and regional policy.
- 3.1.6 In 2000, Bedfordshire produced 1.87 million tonnes of sand and gravel for aggregate purposes, with a total reserve figure of approximately 26.2 million tonnes as at the beginning of 2003.

3.2 Industrial Sands

3.2.1 Industrial sand is a term applied to sands which are not sold as aggregate. These sands supply a wide range of more specialist uses in the following industries including:

- i) Foundry Industry
- ii) Glass Industry
- iii) Horticultural Industry
- iv) Filtration Industry

3.2.2 Current central government guidance only concerns the provision of silica sand which is used predominantly in the foundry and glass making industries. The guidelines recognise the need to maintain national productive capacity and the importance of maintaining long term permitted reserves. Specific guidance on the provision of Silica Sand is given in MPG 15.

3.2.3 During the three years to 2001, Bedfordshire produced an average of 260,000 tonnes of industrial sands from the sand pits in the south of the county, which also produce building and concreting sands. It is difficult to calculate exactly what the potential reserves are as they are found in conjunction with the aggregate reserves and precise proportions may not be known until proven by extraction. A survey of operators conducted in 2002 gave a reserve figure of 9.6 million tonnes at the end of 2001. Silica sand bearing deposits may be overlain or interbedded with inferior grade sands, so when worked some of these reserves may be more suitable for use as building and concreting sands (and vice versa). It is considered good practice that high grade industrial sands should only be used for the most appropriate high grade end use rather than for general aggregate purposes, although it is recognised that this would be impossible to monitor and enforce in practice.

3.3 Brickclay

3.3.1 The only current specific Government guidance for brickclay is that mineral planning authorities should have regard to the demand for bricks generally and continuing demand for bricks with particular physical and aesthetic qualities. More detailed guidance is anticipated and will be incorporated in the forthcoming MWDF review, if timescales permit.

3.3.2 There is currently only one brickworks operational in the county, located at Stewartby. It currently uses in the order of 250,000 tonnes of Oxford Clay every year, taken from the Quest pit in the Marston Vale, and produces around 112 million bricks per year. Current permitted brickclay reserves associated with the Stewartby works are in the order of 90 million tonnes. It is therefore considered that there is no need for further release of brickclay reserves over the Plan period.

3.4 Chalk

- 3.4.1 In Bedfordshire, chalk is currently extracted for two purposes, namely the production of cement and the production of agricultural lime. Government guidance for the provision of raw materials for cement production is contained in MPG 10, which outlines the national planning context for the cement industry. There is no specific national or regional guidance for the provision of raw materials for agricultural lime production.
- 3.4.2 Bedfordshire is in the unique position of supplying chalk by pipeline in the form of slurry, from Kensworth Quarry to cement works located in Warwickshire (over 1 million tonnes per year). Proposals for any increase in capacity at these two works will have implications for the release of reserves at Kensworth. These reserves are currently in excess of 73 million tonnes. As Bedfordshire would not be the determining authority for any application at either of the two cement works, an agreement has been reached between the two authorities to consult each other on any proposals which may affect the other.
- 3.4.3 At the moment the UK does not have sufficient plant capacity to meet UK demand. Imports are required to make up the deficit. The Government places great importance on reducing the level of imports of building and construction material, and wishes to encourage domestic production to at least meet domestic demand.
- 3.4.4 It is against this national background that proposals for new capacity and the reserves to supply this capacity should be considered. Bedfordshire has sufficient permitted chalk reserves to satisfy the provision required by MPG 10 and further applications for chalk extraction will be assessed according to the need for the mineral and other criteria in this Plan.
- 3.4.5 Processing of agricultural lime takes place at Tottenhoe Quarry, now using imported chalk following the cessation of extraction at this site. There are approximately 1.4 million tonnes of chalk reserves in total remaining at both this site and the nearby Landpark Wood quarry, which is currently dormant.

3.5 Fuller's Earth

- 3.5.1 There is currently no Central Government Guidance specifically concerned with the extraction of this mineral, apart from what appears to be a general philosophy that as far as practicable, UK industry should be supplied from UK sources of fuller's earth. Scarce resources of high grade minerals should be reserved for the most appropriate high grade end use. Accordingly the County Council will press for alternatives to fuller's earth for appropriate, lower grade end uses where this is possible.
- 3.5.2 The occurrence of fuller's earth throughout the county is very sporadic, due to the special geological conditions required for its formation. A recent study of fuller's earth resources in England and Wales has discovered a number of new occurrences, some of which may be of economic interest. However, the study does state that in view of the large volume of data now available it is extremely unlikely that large deposits of fuller's earth remain undetected. The study has therefore confirmed earlier views that the best prospects for

finding thick fuller's earth deposits of potential economic interest are in those areas near to known deposits of current and former economic importance.

- 3.5.3 Current permitted reserves of fuller's earth in Bedfordshire will be exhausted by the end of 2004. These reserves occur at one site at Woburn/Aspley Heath. An appeal against the MPA's refusal to grant planning permission for an extension of the site was dismissed by the Secretary of State in 2002 on the basis that there was no evidence that need for the mineral outweighed the landscape and ecological impact of the development. A subsequent High Court challenge by the applicants also failed. For these reasons, the County Council will continue to resist applications for working of fuller's earth in this area.
- 3.5.4 Note that references to "clay" in this plan relate to clay used for brickmaking purposes and not fuller's earth.

3.6 *Building Stone*

- 3.6.1 There are currently no building stone quarries in Bedfordshire. The little demand that there is for restoration and extension work is currently met by importing stone from surrounding counties. However imported stone often has different properties to local stone, and is not always suitable for the repair of old buildings or the construction of new buildings in keeping with local character. Appropriate small-scale working of stone to serve local need is therefore supported in principle.

3.7 *Aggregate Recycling*

- 3.7.1 The revised National and Regional Guidelines for Aggregates Provision in England forecast a reduction in the demand for primary land-won aggregates into the 21st century from the projections of the previous MPG 6. This is partly because the current guidance over estimated demand, but also because developers are now under more financial and environmental pressure to re-use and recycle aggregate.
- 3.7.2 Recycled aggregates can substitute for virgin resources in a variety of applications, thus reducing pressure on primary mineral resources. In recent years capacity for aggregates recycling has increased in the plan area, and this is a trend that the MPA wishes to encourage in future years.
- 3.7.3 Policy for aggregates recycling appears in section 5.19 (Inert Wastes).

4 MINERALS: POLICIES

4.1 Aggregates Landbank

<i>Policy number</i>	<i>Topic</i>
M 2.—	Aggregates Landbank
The MPA will monitor permitted aggregate reserves and endeavour to maintain a landbank of at least 7 years throughout the plan period for both concreting sand and gravel and building sand for aggregate purposes. Should the aggregates landbank fall below seven years within this plan period, the MPA will take appropriate action in order to identify the need and, where appropriate, grant planning permission, for the release of additional reserves.	

~~4.1.1—Current Government and regional guidance requires the maintenance in the plan area of an aggregates landbank sufficient for the supply of 1.93 mt (million tonnes) per annum up to and including 2016.~~

~~4.1.2—It is recognised, however, that there will always be uncertainties when predicting need for future mineral extraction. The effects of, for example, changes in legislation, the aggregates levy and the state of the economy may mean that mineral forecasts will need to be altered. Should this need arise, the MPA will take appropriate action to review the local supply and demand context, and make any policy adjustments required.~~

~~4.1.3—When predicting how much of each aggregate is required, a 50:50 split between building sand and concreting sand and gravel has hitherto been employed, on the basis of historical production figures. This method does not, however, reflect the fact that Bedfordshire has proportionately larger reserves of building sand than other counties in the region, nor that the other authorities in the East England region do not follow this approach. Also, it is difficult to accurately assess reserves of individual aggregate categories, because reserves in the ground generally include a mixture of categories, with exact ratios not known until proven by actual extraction.~~

~~4.1.4—However, MPG 6 states that a landbank of at least 7 years for aggregate sand and gravel should be maintained, and that separate landbanks may be appropriate providing that the reserves of different types may be identified separately and unambiguously.~~

~~4.1.5—In light of the above, the MPA will consult with the minerals industry to assess the appropriate split between building sand and concreting sand and gravel. This may then lead to a revised requirement to be met over the plan period that would replace that set out in Table 1. A topic-based site specific plan will then be prepared as a matter of urgency to identify appropriate sites or preferred areas to meet any identified need.~~

Table 1. Aggregates reserves and landbank

	Million Tonnes	Landbank in Years
Annual Bedfordshire land-won sand and gravel provision (MPG6, SERAWP)	1.93 mtpa	4
Total provision required for Plan period	30.88 mt	16
Total reserves at start of plan period	38.20 mt	19.8
Total excess reserve	7.32 mt	3.8

4.1.6 — MPG 6 advises (paragraph 64) that in preparing the Minerals Local Plan, the MPA should be satisfied that a landbank can be maintained at the end of the plan period, although specific reserves to satisfy the post-plan-period landbank need not be identified in the plan itself. In preparation of this plan, landowners and minerals industry operators were invited to suggest sites with potential aggregate reserves for consideration in the plan process. As a result of this exercise, 35 sites for aggregates extraction were proposed, comprising a total of 27 million tonnes proven reserves and a further 17 million tonnes probable.

4.2 Silica Sand Landbanks

Policy number	Topic
M 3. —	Silica Sand Landbank
The MPA will monitor silica sand reserves and endeavour to maintain a landbank of at least 10 years for individual production sites. Should the landbank for a given silica sand site fall below ten years within this plan period, the MPA will take appropriate action in order to identify the need and, where appropriate, grant planning permission, for the release of additional reserves.	

4.2.1 — Silica sand is a nationally scarce resource with high-grade end uses. National guidance for its production is given in MPG15, and indicates that where deposits occur, they should be safeguarded by the MPA. MPG15 also identifies a need for individual extraction sites to maintain a 10 year landbank of reserves. This need will be determined having regard to the nature, end use and scarcity of the particular silica sand deposit and the investment needed to maintain production.

4.2.2 — In past surveys, industrial sand reserve figures have varied substantially from one year to the next, even when no new sites are permitted. Annual reserve figures rarely tally with sales figures from one year to the next. This may be due to any of the following reasons:

- i) — Further reserves have been permitted;
- ii) — Current reserves have been reassessed;

- iii) ~~Combined reserve figures are submitted one year, then supplied separately the next;~~
 - iv) ~~Aggregate minerals are sometimes sold for low grade industrial use, and vice versa;~~
- 4.2.3 ~~In light of the above, the MPA will consult with the minerals industry to identify those sites where there is a particular quality of silica sand with a specific end-use and for which a 10 year landbank would need to be maintained. A topic based site specific plan will then be prepared as a matter of urgency to identify appropriate sites or preferred areas to meet any identified need.~~

4.3 **Protection of Mineral Resources / Mineral Consultation Areas**

Policy number	Topic
M 4. —	Protection of Mineral Resources / Mineral Consultation Areas
In the Mineral Consultation Areas, the MPA will make every effort to safeguard mineral resources which are, or may come to be, of economic importance, from unnecessary sterilisation by other types of development which would be a serious hindrance to their extraction. Where development is likely to result in the sterilisation of such resources, the MPA will encourage the prior extraction of the minerals where appropriate.	

- 4.3.1 ~~Minerals are a valuable but finite resource, which can only be worked where they naturally occur. As a general principle, therefore, it is important to prevent mineral reserves from being sterilised. Government guidance on this issue is contained in MPG 1, MPG 6 and MPG15.~~
- 4.3.2 ~~Bedfordshire contains extensive deposits of a variety of minerals, which form an important local and national resource. It is desirable to prevent both the unnecessary sterilisation of these reserves, and to safeguard against other development which would prejudice their extraction. In some cases it may be practicable to extract a proportion of the deposit but not all of it, to enable development to occur at a lower level than existing ground levels. When considering the appropriateness of prior extraction the MPA will consider whether there are any planning or practical objections to such extraction.~~
- 4.3.3 ~~MPG 2 states that “consultation area procedures exist to ensure that district planning authorities that are not mineral planning authorities do not unduly sterilise important mineral resources by permitting surface development. MPA's are empowered to declare mineral consultation areas by virtue of Section 86(2)(c) of the Local Government, Planning and Land Act 1980. When a district planning authority receives a planning application for any development within an area which the county have notified as one in which development would affect or be affected by the winning and working of minerals (other than coal) the district must consult the mineral planning authority. Mineral consultation areas do not in themselves constitute a land~~

use policy; ~~there is no presumption for or against mineral development in the notified areas.~~ However any development plan policy on the safeguarding of minerals found within such areas would be a material consideration”.

4.3.4 — ~~The County Council has notified the three District Councils in Bedfordshire of areas where consultation is required on any applications for development which might sterilise mineral deposits (other than developments within built-up areas or certain minor developments). These consultation areas, revised in April 2001, are shown in the proposals maps and generally reflect the extent of geological resources in Bedfordshire which may be extracted for minerals. In addition to consultation on specific applications, the MPA will expect District Authorities to take account of Mineral Consultation Areas when drawing up local plan proposals. Where a development plan land allocation is contemplated on mineral bearing land, the issue of prior mineral extraction should be considered in full. The MPA may object to the allocation of land within District Local Plans if it has not been demonstrated that mineral sterilisation issues have been considered.~~

4.3.5 — ~~Developers should demonstrate, in appropriate cases, that workable mineral resources do not exist on their proposed site. Where minerals are present, then their proposals should take this into account. In extreme circumstances where this process is not followed, the MPA may request that the application be refused or ‘called in’ for determination by the Secretary of State. However, the MPA recognises that in certain cases prior extraction of minerals may be neither relevant, feasible nor desirable.~~

4.4 Rationalisation of reserves and restoration of old sites

<i>Policy number</i>	<i>Topic</i>
M 5.—	Rationalisation of reserves and restoration of old sites
Planning permission will be granted for proposals which: a) lead to the rationalisation of reserves, or; b) 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.	

4.4.1 — ~~Minerals can only be worked where the resource exists. Inevitably this leads to a concentration of workings, both current and disused, in certain locations. Old consents, sometimes given decades ago, can still be operational despite their being in locations which nowadays would not be acceptable. Also, the need for sensitive and thorough restoration was not so well recognised and the conditions imposed on planning consents in the past were much less rigorous than those imposed today. Until the 1981 Minerals Act, many consents had no time limit. This Act imposed a 60 year life on these consents, which will now expire in 2042.~~

4.4.2 — ~~MPG 14 'Environment Act 1995: Review of Mineral Planning Permissions' covers the duty by MPAs to undertake periodic reviews of old planning permissions (ROMPs) in order to bring planning conditions up to modern~~

environmental standards. The ROMP process applies in the first instance to all sites approved between when planning permission was first required (30th June 1948) and 22nd February 1982. Active sites were required to submit revised working conditions for approval, whilst dormant sites must be subject to the ROMP process before operations can resume. All planning permissions (including previous ROMPS) must be reviewed every 15 years.

- 4.4.3 — Old mineral sites worked between 21st July 1943 and 30th June 1948 were granted IDO's (Interim Development Order Permissions) which act as valid planning permissions. Owners or operators of sites with IDO permissions were required to register them for review with the MPA by 25th March 1992, or they would cease to have effect. This process is covered in more detail in MPG8 and MPG 9.
- 4.4.4 — Old abandoned mineral workings can have potential as a public amenity and/or wildlife habitat. They can be of considerable importance for nature conservation, and in some cases for landscape enhancement, having undergone a process of natural revegetation. In certain cases, an 'unrestored' site may be considered restored because the process of natural revegetation makes the site of nature conservation value. Some unrestored workings are of sufficient importance to have been designated as Sites of Special Scientific Interest or County Wildlife Sites. Quarry faces can also provide a means of observing the geological structure, and occasionally fossils, and may be worthy as designation as a Regionally Important Geological Site (RIGS).
- 4.4.5 — Where a site has been long abandoned it may not be possible for the MPA to take effective action to secure appropriate restoration. But where this is possible, the MPA will be willing to work with mineral operators to prepare joint schemes ensuring that modern standards of restoration and aftercare are implemented. It is also in the operator's best interests to prepare and act upon such schemes as a commitment to high standards of restoration, even when this is not obligatory. This is an effective way of demonstrating a responsible and caring attitude to the environment and of minimising public opposition to future schemes. For example, Brogborough and Stewartby lakes have been restored to an acceptable level, with significant recreation and amenity value. Restoration schemes have been agreed well in advance of mineral extraction at some sites as part of the ROMP process.
- 4.4.6 — Long standing permissions and workings sometimes have the potential for rationalisation. This can achieve benefits for the environment and the community by, for example, the revocation of planning consent for part of the site close to a settlement, or where there is a landscape feature that it would be desirable to preserve, and by providing for another compensatory area of similar size in a less sensitive position.
- 4.4.7 — All proposals for the rationalisation of workings will be considered on their merits. If the opportunity arises, the MPA 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 MPA to review the restoration requirements of old sites which in many cases are inadequate. Similar benefits may be achieved as above, in such cases.

4.5 Requirements for determination of minerals applications

Policy number	Topic
M.6.—	Requirements for determination of minerals applications
<p>Before granting permission for the extraction of any mineral, the MPA will need to be satisfied as to:—</p> <ul style="list-style-type: none"> a) The existence of workable deposits of an acceptable standard; b) The proposed method and programme of working; c) Adequate landscaping and screening proposals, where necessary, to protect local amenities during the period of extraction; d) Proposals for the effective restoration of the workings, where possible on a progressive basis, to a state enabling an appropriate afteruse; e) Proposals for the after-care and management of the restored land. 	

4.5.1—The 1997 County Structure Plan is clear in its commitment to promoting development in Bedfordshire, whilst at the same time conserving and enhancing the environment of the County. Mineral extraction is an important aspect of this overall strategy as minerals developments are lengthy processes, with potential impacts which may be sustained over a considerable period of time.

4.5.2—National policy recognises that minerals can only be worked where they occur. This has implications for the environment, especially as geological conditions dictate that mineral reserves are often found in areas of high quality agricultural land, or in areas which are environmentally sensitive in landscape or nature conservation terms.

4.5.3—In the light of this it becomes even more important to require high standards of working, restoration and after-care, in order to minimise the disturbance during operation and to achieve high quality restoration. The MPA recognise that depending on the type of mineral extraction operation, it is not always possible to restore workings on a progressive basis. However, in those cases where progressive restoration is not possible, restoration operations should commence as soon as extraction operations cease.

4.5.4—The above checklist provides guidelines for operators in drawing up proposals for mineral extraction operations. Where an application involves the erection or modification of plant it should include an assessment of that proposal against the factors listed above. Further detailed guidance on the information required for such proposals is given in the MPGs, e.g. MPG 7. The MPA will need to be satisfied that these requirements have been fully addressed.

4.5.5 — ~~The QPA has published a Code of Practice for all member operators that urges operators to adopt higher standards than those required by law. This stance is welcomed by the MPA.~~

4.5.6 — ~~However, there remain a number of operators in the county who are not members of the QPA, and are therefore not bound by the code. The MPA will expect such operators to adopt similar standards to those laid down by the QPA.~~

4.6 *Importation of materials for processing*

<i>Policy number</i>	<i>Topic</i>
M 7. —	Importation of materials for processing
<p>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: —</p> <p>a) It enables the working of a site which is otherwise considered to be uneconomic and/or unworkable; or</p> <p>b) It allows material to be processed or blended to achieve a higher quality or more saleable product; or</p> <p>c) It enables the working of a nearby site where the establishment of a processing plant would be subject to overriding environmental objections.</p> <p>In considering such proposals, the MPA / WPA will take into account in particular, the environmental, amenity and transport effects of intensifying the use or prolonging the life of the plant, including the implications for the site restoration programme.</p>	

4.6.1 — ~~The operation of a mineral site may require the erection of various associated structures and buildings. For example, sand and gravel generally require washing and grading prior to use. In most cases, plant and machinery uses the material extracted at the site together with minor import of other material as necessary. However, in some cases, for example at silica sand and specialist sand sites, the level of investment in a complex and central plant site may require importation of material from other sites in the area for processing.~~

4.6.2 — ~~It is considered that minerals extraction is essentially a temporary use of land, and that restoration should follow the working of a site as quickly as possible. Therefore, in order to avoid prolonging the life of a site beyond that which is absolutely necessary to work the mineral or restore a site, the MPA will normally resist proposals for plant and machinery which are used to process material won primarily from sites other than that at which they are processed. This will also ensure that final restoration of a site is not unnecessarily delayed.~~

4.6.3 — ~~Accordingly, the County Council would wish to ensure that plant and machinery whose only justification is the relationship to a specific site are removed promptly following the cessation of working at that site (i.e. once the original purpose for the development has been removed). It should be~~

~~noted that mineral extraction sites should be worked with processing plants on site and not remote from the working. If it is intended to bring any materials into a site for processing, this should be stated at the application stage and details should be included for consideration of the additional traffic movements associated with the importation.~~

- ~~4.6.4 — Balanced against the above, there may be instances where the retention of a central processing plant may be acceptable, for example when a mineral deposit is sparsely distributed and only worked on a small scale. Where an environmentally acceptable plant site exists, factors may combine to provide a justification for the establishment of a central processing facility. This would ensure the most efficient exploitation of environmentally acceptable and recoverable mineral resources.~~

4.7 Borrow Pits

Policy number	Topic
M 8.—	Borrow Pits
<p>When considering applications for borrow pits particular regard will be paid to the following considerations:—</p> <p>a) Whether the site is required to supply minerals to specific major construction works;</p> <p>b) Whether the site is conveniently located in relation to the project it is intended to supply;</p> <p>c) Whether the site can be restored satisfactorily in accordance with the relevant policies in this plan;</p> <p>d) Whether there is environmental benefit as a result of the proposal.</p>	

- ~~4.7.1 — A borrow pit is a site from which material is used solely in connection with a specific construction project, such as a road. For example, a borrow pit was dug to supply material for use in the construction of the Clapham bypass to the north-west of Bedford, in 2001-2002.~~

- ~~4.7.2 — The MPA recognises the important role borrow pits have to play in major construction projects. In some situations it may be more appropriate to pursue the designation of a specific borrow pit instead of transporting road fill over significant distances, which may be more detrimental to the local environment. This approach is also in accordance with PPG 13 'Transport', which states that the number and lengths of journeys should be reduced. It is acknowledged that under such special circumstances a borrow pit may be acceptable at a site which would otherwise not be considered suitable for mineral extraction. In cases such as this, applications will be subject to the same rigorous examination as for longer-term extraction and fill sites.~~

4.8 ~~Rail aggregates depots~~

<i>Policy number</i>	<i>Topic</i>
M 9.—	Rail aggregates depots
The MPA will seek to safeguard the facilities for rail served aggregate depots at Luton (Leagrave Road) and Elstow. The MPA will give positive consideration to proposals for the development of new facilities, subject to there being a need for the facility and the proposal being environmentally acceptable.	

- 4.8.1 ~~Rail aggregate depots are facilities at which material is transferred from rail to road for onward transportation within the County. They provide for the importation of material, avoiding the use of road for these often lengthy journeys.~~
- 4.8.2 ~~Currently there are two facilities in the Plan area, at Elstow, to the south of Bedford, operated by Lafarge Aggregates, and at Leagrave Road, in Luton, which is operated by Tarmac. In addition a site at Church Street/Crescent Road in Luton was operating until March 1993. Uses on the site at the moment include a waste transfer station, but there are no railway uses. This railhead facility has never been disconnected and could be used at any time.~~
- 4.8.3 ~~The ‘Verney Report’ of 1976 on minerals planning, urged minerals planning authorities to identify and safeguard suitable sites for aggregates depots, in view of the benefits to the south-east of assisting the importation of aggregates.~~
- 4.8.4 ~~The number of sites which are suitable for accommodating rail aggregate depots is relatively limited in view of the criteria which need to be satisfied in developing such a facility. Because of this, the MPA will endeavour to protect existing sites from development which would result in conflict with the railhead use.~~
- 4.8.5 ~~By their very nature, rail aggregate depots can be environmentally intrusive activities occupying considerable areas of land and generating large numbers of lorry movements. Proposals for the development of rail aggregate depots will need to be looked at in the light of the need for the facility and the environmental disturbance that the development may cause. Therefore the impact of, for example, any access and amenity considerations would be taken into account when considering any proposal.~~

5 WASTE STRATEGY

5.1 Background

- 5.1.1 Waste management practice in the UK is currently in a time of rapid and fundamental change. Hitherto, waste management has been essentially a matter of efficient disposal, with resource recovery as a marginal issue. It is now recognised, however, that this approach is untenable in the context of sustainable development. European and National policy has now established the aim of shifting to a more sustainable approach based on waste minimisation and resource recovery.
- 5.1.2 In order to provide a robust foundation for management and planning of waste in the context of new European and National waste policy, the Local Authorities in Bedfordshire and Luton undertook an innovative project during 2000 - 01 to develop an integrated waste strategy for the area. The *Waste Strategy for Bedfordshire and Luton* was developed interactively with local and regional stakeholders, and interprets national and regional guidance. The agreed Strategy establishes the basic guiding policy framework for local municipal waste management and land-use planning for waste, both of which are statutory functions of the authorities. It acts as an 'umbrella' document to guide policy for the Minerals and Waste Local Plan and the local Municipal Waste Management Strategy.
- 5.1.3 This review of the MWLP incorporates the principles established in the *Waste Strategy for Bedfordshire and Luton*, and develops them into specific land-use policies. The overall aim is to limit landfill activity, whilst simultaneously promoting establishment of facilities for recovery of materials and energy. As the waste management industry is currently evolving, the plan does not specify precise technologies to be employed, but instead defines criteria for appropriate technologies based on the Best Practicable Environmental Option (BPEO) approach.
- 5.1.4 Over the period of this plan, the aim is to phase out landfill of untreated non-inert wastes entirely. The original aim of the Waste Strategy for Bedfordshire and Luton, as based on SERP 160 principles, was to achieve this by the year 2010. However, progress in developing alternative waste management facilities has been slower than envisaged, and it is now clear that the 2010 target date is no longer achievable. This Plan therefore now adopts a revised target date of 2015.
- 5.1.5 The Plan does not include specific site allocations at this stage, as the previous capacity projections on which the draft Plan was based have been revised, and further work is now required to review the strategy in light of the emerging RSS14, and to identify appropriate specific sites. Pending this work, this Plan presents criteria-based policies to provide generalised locational guidance in the form of areas of search to assist in the identification of sites pending the preparation of a site-specific Plan under the Local Development Framework format. The strategic capacity projections of this Plan signal the nature and scale of change which is required by local and London authorities to deliver sustainable waste management in the Bedfordshire and Luton area, but should be regarded as indicative pending review of the strategy under the LDF format. The WPA will work to complete the LDF review, and to produce site-specific

development documents, which will be informed by and be in general conformity with the finalised RSS14, as a matter of priority.

- 5.1.6 Detailed land-use implications of this strategy are addressed below under the headings; *key principles, regional wastes, and local wastes*.

5.2 Key Principles

Regional Planning Guidance

- 5.2.1 At the time that the Waste Strategy for Bedfordshire and Luton was prepared, the most recent detailed regional waste planning guidance for the South East region was as given in the SERPLAN document "Revised Waste Planning Advice: A Sustainable Waste Planning Strategy for the South East 1996 - 2010. (SERP 160)" This strategy is based on the following key principles:

SERP 160 strategic principles

1. All local authorities should seek to achieve the levels of reduction, as set out in Table 2.
2. All shire county areas should make provision to achieve self-sufficiency in management of their own waste arisings.
3. London authorities should take planning action to reduce the export of untreated non-inert wastes, so that these are reduced from the present [1996] levels of 7 million tonnes per year, to 3 million tonnes per year by 2005 and to zero by 2010 [excluding post-treatment residues].
4. All authorities should landfill only post-treatment residues of non-inert wastes after 2010.

Table 2.

SERP 160 targets: Minimum reduction in waste requiring management [landfill] 1996-2010 (Relative to 1987-1995 average) (%)

	At 2000	At 2005	At 2010
Inert waste	30	40	50
Semi-inert waste	15	25	35
Non-inert waste	15	20	30

Note: Targets refer to diversion through re-use and recycling / composting

- 5.2.2 More recently (March 2001), revised Regional Planning Guidance for the South East (RPG 9) has been issued. Under the previous regional arrangements, Bedfordshire was part of the South East region, and RPG 9 will remain in effect in the Plan area until superseded by forthcoming guidance for the new East of England Region (RSS 14). In terms of waste

management, RPG 9 states that the South East Region should comply with national waste strategy targets until waste strategies for the new regions are developed by the Regional Technical Advisory Bodies (RTAB's).

- 5.2.3 New guidance for the new East of England region (RSS 14) will be forthcoming from the recently established East of England Regional Planning Body, and will incorporate strategic waste policies based on the Regional Waste Management Strategy produced by the RTAB. The East of England Regional Waste Management Strategy (EERWMS - Jan 2002) was approved by the Regional Planning Body on 16 January 2003, and carries forward the key strategic principles of SERP 160. However, the final strategic framework for waste management will be established in RSS14 itself as this will be the statutory regional planning document for the area. It is anticipated that RSS 14 itself will be adopted late in 2006.
- 5.2.4 Pending the adoption of RSS 14 the SERP 160 principles as incorporated into the EERWMS are taken as the basis for the waste strategy of this Plan. However, the reduction in both imported and local wastes which flow from the application of those principles are unlikely to be achieved within the timescales assumed, as the waste management facilities required to bring about the changes required are unlikely to be in place by 2010. It is therefore recognised that it is now unrealistic to expect to be able to achieve landfill of post-treatment residues only by 2010, and this Plan accordingly adopts a revised target of 2015 for this aim. This approach will be reviewed under the forthcoming transition to the LDF system in order to ensure that the replacement MWLDF is in conformity with RSS14.
- 5.2.5 At time of writing, there is also considerable activity at the sub-regional planning level, notably in the context of the Milton Keynes – South Midlands Sub-Regional Strategy (MKSMSRS). The final outcome of the sub-regional strategy will influence waste planning in Bedfordshire and Luton. This Plan is therefore adopted as an interim measure, pending finalisation of RSS14 and the MKSMSRS, in order to provide a broad framework for the development of waste management facilities required to achieve the strategic aims identified herein. A revised Plan will be brought forward under the new LDF system in order to fully address regional planning issues which remain unresolved at the current time.

Aims of the Waste Strategy of the Plan

- 5.2.6 Accordingly, the SERP 160 principles are adapted and applied as the following strategic aim of the waste strategy of the Plan:
- to reduce the amount of waste which goes to landfill by exceeding the Waste 2000 targets having regard to the strategic objectives of the plan, notably:
 - to achieve county self-sufficiency in managing local wastes; and
 - to ensure that by the end of the Plan period (2015) only post-treatment residues of non-inert waste will go to landfill.
- 5.2.7 Achievement of these aims will be partly dependent on actions of the London authorities, and other areas that currently export waste to Bedfordshire, over which Bedfordshire and Luton have no direct control.

Policy number	Topic
W 1.—	Key principles
<p>Planning permission for waste management proposals will only be granted when the following tests are satisfied:</p> <p>a) The proposal should contribute to meeting the strategic aim of the Plan to:</p> <ul style="list-style-type: none"> • reduce the amount of waste which goes to landfill by exceeding the Waste 2000 targets having regard to the strategic objectives of the plan, notably: <ul style="list-style-type: none"> — to achieve county self-sufficiency in managing local wastes; and — to ensure that by the end of the Plan period (2015) only post-treatment residues of non-inert waste will go to landfill; <p>b) The proposal should take account of the waste hierarchy, and should represent the best practicable environmental option (BPEO) for the waste stream(s) for which it is intended;</p> <p>c) The proposal should not significantly impede development of options further up the hierarchy, unless consideration of BPEO indicates otherwise;</p> <p>d) The proposal should conform with the proximity principle, unless consideration of BPEO indicates otherwise.</p>	

National Waste Strategy

5.2.8 — The current National Waste Strategy for England and Wales is presented in the two-part document entitled *Waste Strategy 2000 (Cm 4693)*. PPG10 (Planning and Waste Management) requires WPA's to have regard to the National Waste Strategy in preparing their waste plans. In this instance, the review of the Bedfordshire and Luton Minerals and Waste Local Plan is intended to meet, as a minimum requirement, the provisions of the National Waste Strategy.

5.2.9 — The over-riding policy aim, both of the National Waste Strategy, and of the source EU legislation, is to move waste management towards more *sustainable* practice, in which emphasis is shifted to *resource management*, rather than simple waste disposal. Waste Strategy 2000 aims to achieve this aim via a series of guiding principles, including the precautionary principle, proximity principle and waste hierarchy, which are endorsed and adopted for the purposes of this plan.

Source Segregation

5.2.10 — Waste Strategy 2000 also places great emphasis on the "greater provision of single waste streams – through separation at source or sorting". This separation of defined waste streams is an essential prerequisite for effective waste management. As a rule, once waste streams become mixed, they will be difficult or impossible to separate effectively, and options for their subsequent management will be significantly reduced. It is important, therefore, to ensure that the waste streams are kept separate to the

maximum practical extent, in order to facilitate efficient recovery of resources.

- 5.2.11 ~~Waste Strategy 2000 states that the above principles should be considered, together with more detailed appraisal of environmental impacts, to determine the **Best Practicable Environmental Option (BPEO)** for dealing with waste in any particular locality and set of circumstances. These principles are adopted and supported for the purposes of this plan.~~

Applying the strategy: Projected requirements for non-inert wastes

5.3 Imported Wastes

Policy number	Topic
W 2.—	Imported wastes
The aim of the Plan is to reduce the quantity of imported waste over the Plan period 2000-2015 having regard to the strategic aims set out in the Plan. Landfill proposals which include the importation of waste from outside the plan area will not be granted permission unless it can be demonstrated that there is a need for the imported waste to be deposited in the Plan area which cannot be met either within the region from which the waste originates or elsewhere within neighbouring regions, having regard to the proximity principle.	

Policy number	Topic
W 3.—	County Self-Sufficiency
Proposals for facilities primarily intended for the management of imported wastes by any means other than landfill will not be granted permission.	

- 5.3.1 ~~Historically, Bedfordshire has played a major role in provision of landfill facilities for disposal of non-inert wastes arising in the south-east region and beyond. This has been a result of the existence of worked out clay pits in the County, which have proved ideal for landfill engineering. However, it is national and regional policy to seek to reduce reliance on landfilling as a means of managing waste. This section outlines the strategy for achieving such reduction. This plan does not attempt to cut off regional waste disposal entirely, but takes a more realistic approach involving a progressive reduction in waste imports over the period to 2015, with a steady-state provision for landfill of post treatment residues thereafter. This approach follows current regional waste planning guidance (see section 5.2 above).~~
- 5.3.2 ~~Hitherto, regional waste has been imported to Bedfordshire only for purposes of exploiting the landfill opportunities provided by the brick pits. No waste has been imported for higher-order treatments, such as materials or energy recovery. The proximity principle indicates that it is more appropriate to site such alternative treatment plant close to the source of waste, thus minimising the need for bulk transport. Therefore, this plan~~

~~makes no provision for management of regional wastes other than as required for final landfill disposal following maximum practicable pre-treatment. It is acknowledged, however, that some local cross-border movement of waste may be acceptable where this would accord with the proximity principle and the BPEO test.~~

Imported Municipal Wastes

~~5.3.3 — In 1998/99, just under 740,000 tonnes of municipal waste was imported for landfill disposal in Bedfordshire. For modelling purposes, this figure is assumed to have been the same in year 2000.~~

~~5.3.4 — The SERP 160 advice to reduce imported non-inert waste from London to zero is applied with the revised target year of 2015, with continuing provision for post-treatment residues. Other shire authorities are expected to be self-sufficient by 2015. The available 1998/99 data does not distinguish between London and shire imported wastes, however it is estimated that 260,000 tonnes of the total imported MSW arose from shire counties¹. The remaining MSW (478,665 tonnes) is assumed to arise in London. The strategic approach incorporates the following principles:~~

- ~~• The progressive reduction in waste exported from London to Bedfordshire, so that by 2015 only post-treatment residues are allowed to landfill.~~
- ~~• For modelling purposes only, treatment is assumed to be via some form of incineration (or alternative thermal treatment), with a mass residual of 29% being taken as typical for such processes.~~
- ~~• MSW assumed to arise from shire counties is reduced to zero by 2015 (application of SERP 160 county self-sufficiency principle)~~

~~5.3.5 — The projected reduction of imported municipal waste requiring landfill in Bedfordshire is shown in Table 3, below. The table also shows cumulative tonnages over the plan period from anticipated adoption (2004 — 2015).~~

Table 3.
Reduction in import of MSW under SERP 160 strategy

Year	Annual Tonnage Imported	Cumulative Tonnage Imported
2000	738,665	
2004	578,704	578,704
2005	–538,714	–1,117,419
2010	–338,764	–3,211,138
2015	138,813	–4,305,104

¹ Estimate based on research into existing contractual arrangements for movement of wastes to Bedfordshire. Details in technical report: 'Waste Strategy: Baseline Data' (available from Bedfordshire County Council).

Imported Commercial and Industrial Wastes

5.3.6 — For commercial and industrial wastes, the SERP 160 principles (as modified) are the same as for imported MSW. From the Baseline Data Study, it is estimated that 75% of imported commercial and industrial waste originates in the London area.

5.3.7 — The results of application of the revised SERP 160 targets to imported commercial and industrial wastes are shown in Table 4. Again, it has been assumed for modelling purposes that the level of import in 2000/01 was the same as 1998/99.

Table 4. —
Projected Reduction in imported commercial and industrial waste.

Year	Annual tonnage	Cumulative tonnage
2000	1,600,554	
2004	1,266,572	1,266,572
2005	-1,183,076	-2,449,648
2010	-765,598	-7,112,595
2015	-348,120	-9,688,153

Hazardous Wastes

5.3.8 — Data for 1998/99 indicate 222,000 tonnes of hazardous waste disposal in Bedfordshire, of which all but 21,000 tonnes were imported to the County. The strategic approach of this Plan is that imported hazardous waste should be treated on the same basis as non-inert waste; i.e. projection to treatment residues only in 2015. This is held to be consistent with increasing restrictions on landfill of hazardous wastes under the provisions of the EU landfill directive. The projected figures for landfill of hazardous waste that derive from this approach are shown in Table 5.

Table 5. —
Projected Reduction in imported hazardous waste.

Year	Annual tonnage	Cumulative tonnage
2000	200,474	
2004	158,642	158,642
2005	148,184	306,825
2010	95,893	890,873
2015	43,603	1,213,469

5.3.9 — At the time that this Plan was under preparation, all three of the operational non-inert landfill sites in the plan area were licensed to handle certain hazardous wastes, but 'L' Field, Stewartby was the only landfill site in Bedfordshire licensed to accept a full range of hazardous wastes. 'L' Field was expected to remain operational for hazardous waste landfill for the duration of the plan period. However, under the terms of the EU Landfill Directive, which requires an end to the co-disposal of hazardous and non-hazardous wastes, all three Bedfordshire non-inert sites are to be classified as non-hazardous and will therefore not be able to accept hazardous waste inputs from July 2004 onwards.

5.3.10 — More generally, there is currently considerable uncertainty at the regional and national levels regarding the future of hazardous waste management. There is little or no guidance regarding likely quantities of hazardous waste arising, nor the infrastructure requirements for treatment or disposal. In this context it is not possible for this Plan to provide a robust planning framework for the management of hazardous wastes at this time, and the figures in Table 5 should therefore be regarded as indicative only.

5.3.11 — The County Council is therefore of the opinion that no further sites should be identified for the importation and disposal of hazardous wastes at this time. Instead, policies and proposals for the management of hazardous wastes will be developed under the forthcoming LDF review, by which time the wider policy context should become clearer.

Summary of projected landfill requirements for all imported wastes

5.3.12 — A summary projection of required landfill provision for all imported wastes is shown in Table 6. Note that, owing to the uncertainties outlined above, this table does not include figures for hazardous waste imports.

Table 6.
Total regional waste imports

Year	Regional imports for landfill	
	Annual tonnage	Cumulative tonnage
2000	2,339,219	
2004	1,845,276	1,845,276
2005	1,721,790	3,567,067
2010	1,104,362	10,323,733
2015	486,933	13,993,257

5.4 Local Wastes

5.4.1 — For planning purposes, wastes which originate in Bedfordshire and Luton have again been classified into *municipal* and *commercial / industrial* streams. As discussed above, the partner local authorities have complete managerial control over municipal wastes, whilst influence over commercial / industrial wastes is limited to advocacy (via networking and partnership working), and more directly through control of the supply of management facilities under the statutory land-use planning system.

5.4.2 — The previous section covered the strategic approach to imported wastes. For such wastes, the main issue of direct relevance to Beds and Luton is the level of landfill provision required. Responsibility for waste minimisation and management of diverted wastes remains with the source authorities.

5.4.3 — By the same logic, responsibility for dealing with locally arising wastes remains with local authorities in Bedfordshire and Luton. Thus, it is considered that provision should be made within the plan area for management of forecast local waste arisings, including facilities required to achieve diversion from landfill. This section covers the strategy for dealing with all locally arising waste.

Local commercial and industrial wastes

- 5.4.4 — Data is available to allow estimation of the total C & I arising in Beds and Luton in 1998/9. The waste strategy baseline data study revealed an estimated 312,000 tonnes of local commercial and industrial waste arising and landfilled in 1998/99. This includes waste that was disposed to landfill outside Bedfordshire and Luton but excludes waste that was recycled. Recent data show no discernible trend in commercial and industrial waste arising, although the 1998/99 figure was lower than in previous years. For modelling purposes no growth (or reduction) in waste arising has been assumed. Also, waste that is currently recycled is excluded from future projections, as the modelling relates to need for additional recovery capacity. Current recycling activity is taken as an assumed baseline and excluded from consideration of future need. The Environment Agency SWMA (Strategic Waste Management Assessment) for 1998/99 estimates around 167,000 of commercial / industrial materials recovery in the plan area.
- 5.4.5 — As with the approach to regional waste imports, the strategy for local commercial / industrial waste is based on the SERP 160 regional guidance. This requires the provision of suitable facilities to manage diversion of local commercial and industrial wastes from landfill. Provision will be sought for management capacity equivalent to all commercial / industrial waste arising in Bedfordshire and Luton, including that currently exported to neighbouring authorities. This allows for a degree of flexibility in allowing local cross-border waste movements, in accordance with the proximity principle.
- 5.4.6 — The waste management industry is currently evolving rapidly. Therefore, to maintain the necessary flexibility to achieve optimum BPEO solutions, it is not proposed to specify precise technologies for achievement of landfill diversion at this stage. For modelling purposes only, typical incineration technology has been assumed, with process residues of 29% by weight. In practice, any combination of energy and / or materials recovery may be implemented. For capacity modelling, a steady reduction to residues-only landfill in 2015 is assumed. Projected capacities for landfill and alternative treatment plant are shown in Table 7.

Table 7.

Landfill and alternative treatment requirements for local commercial and industrial waste (all Beds and Luton)

Year	Annual landfill tonnage	Cumulative landfill tonnage	Annual tonnage requiring alternative treatment
2000	312,234		0
2004	253,118	235,118	83,262
2005	238,339	491,456	104,078
2010	164,443	1,461,463	208,156
2015	90,548	2,061,993	312,234

- 5.4.7 — This approach implies provision of additional alternative waste management facilities with an annual capacity of some 312,000 tonnes by the year 2015 (assuming no growth or reduction in waste arising). Again, the aim is to achieve as much of this capacity as possible via development of recycling and composting facilities, employing energy from waste solutions only

~~where recycling and composting alone cannot achieve the desired diversion from landfill. There is potential for developing the required infrastructure in conjunction with facilities required for treatment of local municipal wastes. The WPA will encourage such an approach.~~

Local hazardous wastes

~~5.4.8 — Around 20,000 tonnes of locally arising hazardous waste are disposed to landfill in Bedfordshire each year. This figure is not counted with the local commercial / industrial waste figures for planning purposes as the requirements for treatment and disposal of hazardous wastes will differ from 'normal' commercial and industrial wastes, and there is considerable uncertainty regarding the future of hazardous waste management (see paragraphs 5.3.8 to 5.3.12). The uncertainty surrounding the future of hazardous waste sites is common throughout the East England region, and pending a clearer impression of the future requirements, the County Council is of the opinion that no further sites should be identified for the disposal of hazardous wastes at this time. The approach to management of hazardous wastes will be reassessed when the national and regional context becomes clearer.~~

Local Municipal Wastes

~~5.4.9 — Local authorities have direct responsibility for the collection and management of municipal wastes in Bedfordshire and Luton, as well as for making appropriate provisions in the land-use plan (MWLP). Waste in Bedfordshire is jointly managed by the District / Borough Councils (as collection authorities) and the County Council (as disposal authority). Waste in Luton is wholly managed by the unitary Luton Borough Council.~~

~~5.4.10 — Luton became a unitary authority in the 1997 Local Government Reorganisation. Since this time, waste management systems in Beds and Luton have diverged. The *Bedfordshire and Luton Waste Strategy* has been developed in partnership, and seeks to identify potential future synergies. Nonetheless, the current systems and management responsibilities in the areas of Bedfordshire and Luton remain separate at this time and for this reason the strategic approaches for each area are outlined separately below.~~

~~5.4.11 — The *Bedfordshire and Luton Waste Strategy* is intended to establish the general future directions for all wastes managed in the area. For local municipal wastes, it sets out the broad aims and mechanisms which will be employed to achieve a more sustainable and integrated management system. From these general principles, more detailed policies and programmes will be developed separately for Bedfordshire and Luton, with the former producing a statutory municipal waste management strategy under the Waste and Emissions Trading Act. This strategy will follow the format laid out by DETR guidance².~~

~~5.4.12 — Overall, the *Bedfordshire and Luton Waste Strategy* applies the same SERP 160 based principles to local municipal wastes as for other waste streams.~~

² *Guidance on Municipal Waste Management Strategies*, DETR, March 2001.

Again, this Plan adopts the modified target year of 2015 for attainment of residues-only landfill. Thus it aims to:

- end landfill of untreated waste by year 2015;
- establish the necessary infrastructure to enable self-sufficiency for treatment of waste arising within Bedfordshire and Luton;

5.4.13 These aims should enable Bedfordshire and Luton to meet, and surpass, the National Waste Strategy targets for landfill diversion in the short, medium and long term.

5.4.14 For municipal materials recycling (including composting) the SERP160 targets have been superseded by targets of the National Waste Strategy. National Waste Strategy targets up to 2005 have themselves been broken down for individual local authorities and given statutory force by the Audit Commission (under the Best Value framework). These targets will be taken as the minimum performance standard for materials recycling and composting. Where possible, the aim is to surpass the statutory targets. A summary of the combined Audit Commission / National Waste Strategy recycling / composting targets is shown in Table 8.

Table 8.

Targets for materials recycling / composting in Bedfordshire and Luton.

Year	Bedfordshire	Luton
2003/4 (Audit Commission)	12%	16%
2005/6 (Audit Commission)	18%	24%
2010 (National Waste Strategy)	30%	30%
2015 (National Waste Strategy)	33%	33%

5.4.15 To meet the above aims and targets, it will be necessary to radically overhaul the current landfill-orientated waste management systems in order to establish an efficient and integrated waste recovery and treatment system. The waste collection and disposal authorities will address waste collection and treatment systems jointly to achieve the required functional integration. In Bedfordshire, this will be covered in the Municipal Waste Management Strategy.

MSW in Bedfordshire

5.4.16 For waste **collection**, the *Waste Strategy for Bedfordshire and Luton* leads to the conclusion that the most effective way to achieve efficient materials recovery will be to concentrate effort on the effective segregation of wastes at source, i.e. at the household. To achieve this the waste collection and disposal authorities are undertaking further research, consultation and pilot testing in order to determine the most effective means to collect source-segregated waste from the household. This will entail some form of three-

~~stream collection, targeting dry recyclables (e.g. paper, metals and plastics), organics (garden waste and possibly kitchen wastes), and residual mixed waste.~~

~~5.4.17 For **treatment** of collected waste, the waste collection and disposal authorities will continue to research and consult on the most appropriate technologies. At this stage, it is envisaged that the following treatments will be appropriate for the three collected waste streams:~~

- ~~• For the **dry recyclable** stream: development of a manual or semi-automated sorting system similar in concept to that currently deployed at the Elstow MRF, although not necessarily employing the current orange bag scheme. This will be enhanced to enable a greater range of materials to be recovered.~~
- ~~• For the **biodegradable waste** stream: one (or more) centralised composting systems. In the first instance, collection of biodegradable waste will focus on “green” garden wastes, which may be treated via a relatively simple open windrow composting system. At this stage enclosed composting plant is envisaged for any subsequent expansion into composting of kitchen and other biodegradable wastes. This is in order to achieve greater process control and reduced impact on local amenity.~~
- ~~• For **residual mixed waste**: an integrated treatment plant including further (automated) materials recovery. Any materials not recovered (or for which a viable market does not exist) would be processed to produce fuel feedstock for energy recovery. Energy recovery plant may be integrated with processing plant, or located off-site. In either case it will be necessary to ensure that quantities of waste used for energy recovery do not impede efforts to achieve maximum materials recycling.~~

~~5.4.18 There may be considerable advantages in process and transport efficiency if the above facilities can be developed on single integrated sites to serve the major population centres in the north and south of the plan area. Such ‘waste management parks’ may also create opportunities for development of business ventures using recovered materials and energy (possibly combined heat and power) as feedstock. The WPA will support and encourage development of such fully integrated sites.~~

Projection of required process capacities for Bedfordshire

~~5.4.19 Municipal waste in Bedfordshire is currently growing by around 4% each year, this being a combination of growth in waste arising per household and growth in the numbers of households. It is assumed that this growth will continue to 2010 and that thereafter the growth in waste per household will reduce by 50%. The resultant quantities of waste that will require treatment by the various management techniques will be as shown in Table 9 below. For modelling purposes, the Audit Commission 2005 target (18%) is~~

employed, with WS2000 targets applied for years 2010 onwards. A steady ramp is assumed for recycling performance between target years. Establishment of non-landfill end-treatment capacity by 2010 is also assumed. A 'typical' incineration process is modelled for indicative projections, but this is not intended to be in any way prescriptive and some other treatment process (or processes) may be employed in practice. All quantities in Table 9 are in tonnes per year, except for the column 'cumulative landfill', which shows the build up in landfill from 2004 onwards³. (Note that landfill figures include process residuals, so that the sum of process tonnages does not equate to the total MSW arising).

Table 9. Quantities of MSW treated by landfill and alternative means (Bedfordshire) (tonnes)

Year	Total MSW arising	Annual landfill	Cumulative landfill	Recycling / composting	End treatment plant
2000	217,231	202,047		15,184	0
2004	258,782	219,965	219,965	38,817	0
2005	268,909	220,505	440,470	48,404	0
2010	321,507	65,266	1,082,474	96,452	225,055
2015	365,814	71,078	1,425,869	120,719	245,095

Note: treatment tonnages do not equate to total MSW arising, owing to additional landfill of process residues

5.4.20 The above growth figures are based on recent trends. Whilst the WPA will prepare for such growth as the 'worst case', it is not intended to establish full process capacity at the outset to deal with the full projected quantities over the whole plan period. This is particularly crucial in terms of any EfW plant capacity, for which over-provision would have potential to undermine recycling efforts. Accordingly, actual growth rates will be monitored and plant established in a phased manner as appropriate. At time of writing, the figures in Table 9 should be taken as indicative of phasing for new capacity.

5.4.21 Whilst the kerbside collection and allied treatment systems will form the core of the future MSW management strategy, it will be supported by development and enhancement of the network of Civic Amenity Sites and local recycling sites. This will provide maximum choice to residents. Materials segregation at the Civic Amenity Sites will be upgraded to enable them to perform as full *Household Waste Recycling Centres* rather than the more traditional convenience tips.

MSW management in Luton

Options for Recycling and Waste Management

5.4.22 It is apparent that the current methods adopted by Luton in meeting the recycling targets are working. Luton is committed to recycling as well as waste reduction. The Council regards further improvement of recycling rates as a priority.

³ Cumulative landfill is calculated from 2004 onwards as the landfill need assessment (section 5.13) is based on available landfill capacities recorded by survey at the end of 2003.

Achieving Targets

5.4.23 Luton Borough Council commenced strategy development work prior to the start of the joint Beds and Luton Waste Strategy. As part of this work, Luton Borough Council undertook a separate consultation exercise, with a consultation document sent out to approximately 1000 consultees in March 1999. The consultation was based largely on a study commissioned by the Council and undertaken by AEA Technology (independent consultants). The document recommended a collection system which allows separate collection of dry recyclable and garden waste to facilitate efficient treatment and recycling and reduce the amount of waste that would need to be disposed of. This would increase recycling levels in the short to medium term but an additional recovery option such as Energy from Waste or Combined Heat and Power would need to be considered for the long term.

5.4.24 This is essentially the same solution as that subsequently identified for the rest of Bedfordshire. A contract for management of Luton's municipal waste up to 2012 has recently been let, based on the above approach. The required process capacities for Luton (including waste growth projections), as modelled in development of the joint Beds and Luton strategy, and updated to incorporate provisions of the recent contract, are shown in Table 10.

Table 10.

Quantities of MSW treated by landfill and alternative means (Luton) (tonnes)

Year	Total MSW arising	Annual landfill	Cumulative landfill	Recycling / composting	End treatment plant
2000	92,168	82,949		9,219	0
2004	108,298	88,578	88,578	19,720	0
2005	109,774	85,828	174,406	23,946	0
2010	117,485	65,415	527,912	52,070	0
2015	125,675	18,041	709,060	63,466	62,209

Note: treatment tonnages do not equate to total MSW arising, owing to additional landfill of process residues

Summary of projected process requirements for all Beds and Luton Municipal Waste.

5.4.25 Table 11 indicates the projected capacity requirements for dealing with municipal wastes arising in all Bedfordshire and Luton.

Table 11.

Quantities of MSW treated by landfill and alternative means (All Beds + Luton) (tonnes)

Year	Total MSW arising	Annual landfill	Cumulative landfill	Recycling / composting	End treatment plant
2000	309,399	284,996	0	24,403	0
2004	367,080	308,543	308,543	58,537	0
2005	378,683	306,333	614,876	72,350	0
2010	438,992	130,681	1,610,386	148,522	225,055
2015	491,489	89,118	2,134,929	184,185	307,305

Note: treatment tonnages do not equate to total MSW arising, owing to additional landfill of process residues

5.5 Implementing the strategy: provisions for future management of waste

5.5.1 As described, the central aim of the waste strategy is to reduce landfill to a practical minimum by;

- minimising waste at source, and;
- establishing efficient systems and sufficient alternative facilities for dealing with local wastes in a more sustainable and integrated manner, and;
- restricting the supply of landfill voidspace for regional waste imports

5.5.2 Details and policies for the various waste management options are set out below, in approximate order of the waste hierarchy.

5.6 Waste minimisation and management of wastes at source

Policy number	Topic
W 4.	Waste minimisation
The WPA will actively encourage an overall reduction in the amount of waste generated and thus reduce the need for land for waste management, wherever waste is generated, treated or disposed of within the plan area.	

5.6.1 Waste minimisation is a prime aim of sustainable waste management, and is therefore at the top of the waste hierarchy. Reducing or eliminating waste at source minimises financial and environmental costs of treatment and/or disposal that would otherwise be incurred. Four basic principles of waste minimisation are outlined below:

Four basic principles of waste minimisation

1. Not using the raw material/product/item in the first place

This not only reduces the amount of waste to be disposed of once it is no longer needed, but can also save energy, water, raw materials and solid and liquid waste arising from manufacturing and packaging processes.

2. Using raw materials/products/items which have been produced, packaged and transported in the most 'environmentally friendly', resource and energy efficient way

Many companies have recognised that minimising waste and/or using raw materials that are waste products from other processes can save money, raw materials and energy. This could be by for example, refining manufacturing processes, better housekeeping, employee awareness and partnerships with other companies. Many ways of minimising waste and energy use are identified by carrying out a life cycle analysis on a product or process. This looks at the 'cradle to grave' impact of each stage in the life of the product or process, and helps to identify ways it can be made more efficient.

3. Using products/items that can be re-used or easily repaired

It is the decision of the consumer whether to buy disposable or long-lasting products, and manufacturers to provide or support an efficient repair service.

4. Reducing the hazardous nature of waste.

Wastes that are less hazardous will not require complex treatment and disposal methods and are less likely to harm people or the environment.

5.6.2 A large number of waste minimisation projects and programmes are planned or underway in Bedfordshire and Luton. They aim to advise and educate both members of the public and companies on the importance of waste minimisation and how it can be achieved.

5.6.3 In general, initiatives and policies for promotion of waste minimisation will fall outside the scope of the MWLP, as by their nature they do not directly involve the use of land. The MWLP therefore has only a limited ability to contribute to the aims of waste minimisation.

5.6.4 However, there are two direct areas in which the MWLP can relate to waste minimisation. First, the plan can encourage minerals and waste operations themselves to be conducted in such a way as to minimise waste produced. Second, the effects of waste minimisation initiatives can be factored into projections of future waste streams, and hence the required capacities of future facilities.

- 5.6.5 All mineral and waste proposals will be expected to take account of the waste management implications of their operations, including practical measures to minimise the generation of waste. This expectation is expressed in policy GE 1 (matters to be addressed in planning applications), together with policy W 4, which gives more general support for waste minimisation, and policy W 5, which lays out waste management requirements for all developments (including district matters).
- 5.6.6 At time of writing, available data indicate a continuing trend for growth in waste arisings. It is important not to be unrealistic in projecting impacts of waste minimisation initiatives on this general trend. In projecting future waste streams, the following assumptions have been made:
- Local municipal waste will continue to grow according to the current trend (c2.5% per household per year, giving c4.1% total waste growth) until 2010, after which the per-household growth rate will halve under the influence of waste minimisation activities.
 - Average annual arising of local commercial / industrial wastes will remain close to current levels over the plan period. Recent data show no discernible trend, although the 1998/99 figure (312,000 tonnes) was lower than in previous years.
 - Any growth in wastes in areas which currently export to Bedfordshire will be the responsibility of source authorities, and will not be taken into account in determining appropriate levels of provision for regional landfill in Bedfordshire. The regional guidance (SERP 160), on which the waste strategy is based, requires a steady reduction from a base calculated as the average of recorded annual landfill between years 1987-1995 (inclusive).

<i>Policy number</i>	<i>Topic</i>
W 5.	Management of wastes at source: Waste Audits
<p>Proposals that are likely to generate significant volumes of waste through the development or operational phases will be required to include a waste audit as part of the application. This audit should demonstrate that in both construction and operational phases of a proposed development, waste will be minimised as far as possible and that such waste as is generated will be managed in an appropriate manner in accordance with the Waste Hierarchy. In particular, the waste audit should include the following information:</p> <ul style="list-style-type: none"> a) the anticipated nature and volumes of waste that the development will generate; b) where appropriate, the steps to be taken to ensure the maximum amount of waste arising from development on previously developed land is incorporated within the new development; c) the steps to be taken to ensure effective segregation of wastes at source including, as appropriate, the provision of waste sorting, storage, recovery and recycling facilities; d) any other steps to be taken to manage the waste that cannot be incorporated within the new development or that arises once development is complete. <p>Before granting planning permission, the LPA will need to be satisfied that the measures identified in the waste audit represent appropriate waste management solutions in light of the Waste Hierarchy. Where appropriate, the LPA may require additional waste management measures in order to facilitate the movement of waste management up the Hierarchy.</p>	

<i>Policy number</i>	<i>Topic</i>
W 6.	Management of wastes at source: Provision of facilities with new development
<p>The LPA will require the provision of appropriate waste sorting, recovery and recycling facilities for the following developments:</p> <ul style="list-style-type: none"> a) development areas for 100 or more dwellings; b) new development, redevelopment or refurbishment of shopping centres or facilities where the floorspace of existing and new development amounts to 500m² or more; c) major transport, leisure, recreation, tourist or community facilities; d) appropriate smaller developments which frequently attract a significant number of people (e.g. community or shopping schemes). 	

- 5.6.7 These policies apply to all forms of development, not just those minerals and waste developments classified as 'county matters'. As such, the policies will often fall to be implemented by District and Borough LPA's, rather than the MPA / WPA. The policies are intended to ensure that waste management issues associated with both construction and operational phases of the proposal are considered at the design stage, and that suitable measures are incorporated to;
- a) minimise generation of waste, and;
 - b) facilitate recovery of resources from waste.

Construction Phase

- 5.6.8 The construction industry can contribute to national and local targets to reduce the quantity of waste sent for landfill disposal, through sustainable design and construction. During the construction process, waste can be:
- i) **Minimised:** CIRIA (Construction Industry Research and Information Association) have published a number of guides on how to minimise waste at the design and site levels. They have commissioned research that shows that on average 10% of raw materials delivered to construction sites are wasted;
 - ii) **Re-used:** where a site is being redeveloped, low-grade waste from the demolition of existing structures can replace primary aggregates for general fill, backfill to drains, road sub bases, paths and car parking areas. 'Architectural' items such as bricks tiles, slates, doors and windows can be re-used to blend new development in with existing features;
 - iii) **Segregated:** source segregation is a key element in sustainable waste management, as it enables specific wastes to be directed to the most efficient recovery or disposal route. Some waste recycling contractors offer preferential rates where waste has been segregated at source;
 - iv) **Recycled:** Recycled aggregates are construction materials that have been processed either on or off site for re-use in the construction process. Secondary aggregates are mainly lower-grade materials such as colliery waste, power station ash, 'glasphalt' and china clay sand. These materials have the potential to contribute significantly to the overall supply of aggregates. The specification of recycled or secondary aggregates in construction can make a significant contribution towards national sustainable development policy in terms of waste management and minerals supply, particularly by enhancing demand for recycled materials and thus 'closing the loop' of resource recovery.
- 5.6.9 CIRIA also publish guidance on aggregate recycling and other construction issues (www.ciria.org.uk). The MPA supports construction waste minimisation, re-use and recycling as appropriate methods of conserving natural resources which accords with the concept of sustainability.
- 5.6.10 Aggregate recycling is another way that the minerals and construction industries can comply with the proximity principle, especially if the aggregate is re-used on-site, thus eliminating the need for the transportation of

demolition wastes and primary aggregates. All development proposals will be required to demonstrate that waste minimisation, re-use and the use of recycled and/or secondary aggregate in the construction process has been considered.

Operational Phase

- 5.6.11 The way in which development is designed can greatly influence the amount of waste arising that will be sent to landfill by, among other things, ensuring that different waste types are separated at source and may therefore be managed more effectively than would be possible for a mixed waste stream. Waste management issues should be considered in all development likely to generate significant quantities of waste, but the measures to be taken in a particular development will need to be appropriate to its scale. On a small scale, this could mean the provision of a composting unit and the space to store three dustbins outside a house, together with appropriate interior design measures to facilitate segregation of wastes in the home. On a larger scale, appropriate measures could include provision of community 'bring sites', facilities to aid source separation of wastes in industrial units, and waste minimisation projects on new housing and industrial estates. Such facilities will generally be more effective and have least potential for negative amenity impact when built-in at the design stage.
- 5.6.12 The circumstances in which provision of the larger and more centralised facilities, such as community bring sites, would be appropriate will vary with the particular context of a development proposal, including its size, the quantities of waste anticipated and the existing level of waste management infrastructure provision in the locality. The planning authorities will gauge the adequacy of waste management proposals in light of these factors, and will require the provision of appropriate centralised waste sorting, recovery and recycling facilities for proposals that meet or exceed the thresholds of policy W 6. Provision of such facilities and, where necessary, appropriate ongoing management arrangements will be secured by use of planning conditions and/or planning obligations. The planning and waste disposal / collection authorities will work together to provide more detailed guidance regarding the nature, design and ongoing management of appropriate facilities.
- 5.6.13 Developers may find it useful to address the provision of waste related facilities as part of wider sustainability considerations, such as energy efficiency and water use. Developers are encouraged to conduct pre-application discussions with the planning authorities regarding these matters.
- 5.6.14 The WPA will work in partnership with the LPAs, WCAs and WDA to produce more detailed guidance regarding the implementation of policy W 6.

5.7 Integrated Waste Management

Policy number	Topic
W 7.—	Preferred locations for integrated waste management facilities
<p>Planning permission will be granted for integrated waste management systems which incorporate a range of treatment facilities at the following locations:</p> <ul style="list-style-type: none"> a) Within the area of an existing planning permission for a waste management related use, or; b) On land designated for general industrial (B2) use, or; c) On areas of despoiled, contaminated or derelict land. <p>Proposals may include limited areas of land adjacent to sites within the above categories provided that the proposal is substantially located on, and makes effective use of, land in categories a) to c) above.</p>	

Policy number	Topic
W 8.—	Resource recovery
<p>All waste management proposals will be expected to demonstrate that, wherever practicable, they will integrate effectively with operations to recover resources (i.e. materials and/or energy) from waste.</p>	

5.7.1— In general, the principles of the National Waste Strategy indicate that wastes should be managed by the highest possible method of the waste hierarchy. Thus, appropriate materials should be recovered for recycling, whilst lower value or contaminated materials may be better managed via EfW treatment.

5.7.2— Materials recovery may be facilitated by segregation of wastes at source. As a rule, the more it is possible to keep various waste materials separate, the easier it will be to manage their recovery. Once wastes are mixed together, it becomes much more difficult to facilitate recovery in a cost-effective manner.

5.7.3— However, there are practical limits on how much it is possible or desirable to keep wastes separate through the management chain of collection, treatment and recovery / disposal. For the foreseeable future, some mixing of wastes will be inevitable, particularly as regards collected household wastes.

5.7.4— Given the composite nature of local waste streams, it will therefore be necessary to develop *integrated* management systems in order to arrive at the most sustainable solutions. Such integrated systems would subject each fraction of a composite waste stream to the most appropriate treatment. Thus, for example, dry recyclables could be captured for recovery, organic fractions treated by composting, and residual wastes subject to EfW treatment. An integrated waste management system should also include the specification of waste collection techniques, which achieve the appropriate degree of source-segregation for the particular system.

5.7.5 — For the purpose of this plan, the term *integrated waste management* is used on two levels: *functional integration* and *spatial integration*. Functional integration implies integrated management of waste – spatial integration applies to the particular case where various waste management plant are co-located on the same site.

Functional integration

5.7.6 — *Functional integration* describes the need to ensure that each fraction of a given waste stream (for example municipal waste) is treated in the most appropriate and effective manner. This enables the whole waste stream to be managed in the most sustainable manner, taking into account the BPEO for each component fraction. Taking the example of municipal waste, an integrated treatment process may involve the following elements:

- Collection systems to facilitate source segregation: e.g. a three-stream collection of segregated dry recyclable, compostable organic, and residual mixed waste elements;
- Recovery systems for each collected stream: e.g. MRF for dry recyclables, composting or AD plant for organic fraction, EfW plant for residual waste, landfill for process residues.

5.7.7 — Integrated systems of this nature are envisaged in the Bedfordshire and Luton Waste Strategy for management of local wastes. Such systems will give maximum priority to recovery of materials (by recycling and composting), and will include only sufficient EfW capacity to treat that waste which cannot be recovered by recycling and composting. Ideally, a local network of sites would manage waste close to its production and facilitate the move away from landfill towards other more sustainable forms of waste management. It is recognised however, that certain waste management options are only viable when they are centralised and operate on a larger scale. Such major facilities should ideally be located in proximity to major waste sources, and be supported, where appropriate, by local waste transfer facilities for bulking-up and transport of waste from more distant areas.

5.7.8 — Functional integration implies that bulk treatments of waste by single methods, particularly those lower in the waste hierarchy, will not generally be the most sustainable option. Thus, simple landfill or mass incineration of the bulk of a mixed waste stream is not likely to be acceptable in terms of BPEO. The WPA supports the concept of process integration, and will expect all proposals for waste management facilities, particularly for landfill and incineration, to demonstrate how they relate to processes and systems to recover the maximum value from waste in accordance with BPEO principles. Proposals which would involve mass disposal of waste with little or no materials and/or energy recovery will not normally be granted permission.

5.7.9 — Specific policies for each of the distinct elements that may form part of a functionally integrated system are given in the respective process-specific sections of this plan.

Spatial Integration

- 5.7.10 Spatial integration implies consideration of how integrated waste treatment processes relate to each other in terms of physical location. The aim should be to minimise the need to transport wastes to each element of an integrated treatment system. Thus, there may be obvious advantages in locating various treatment facilities, such as materials recovery, composting and EfW plant, on a single site. Even where this is not practical, the various components employed in an integrated waste management system should be located in as close proximity as possible. Where movement of waste between facilities is unavoidable, it will generally be preferable to concentrate on minimising transport of bulk untreated wastes.
- 5.7.11 Fully integrated waste management 'parks', incorporating a full range of treatment facilities, have potential to realise considerable gains in process, transport and land-use efficiency. For example, energy recovery plant could supply both power and heat (CHP) for allied processes on the site. Further, such sites may have potential to generate business opportunities using recovered wastes and energy as feedstock, thus completing the resource recovery cycle.
- 5.7.12 The WPA considers integrated sites to hold considerable potential in realising more sustainable waste management practice, and will support their development in suitable locations to serve the plan area. The policy identifies those categories of land which are appropriate for development of integrated waste management facilities. Some flexibility is retained in order to allow limited take up of land adjoining sites in the identified categories in cases where an otherwise desirable development could not physically be accommodated. This is not intended, however, to give licence to large scale incursion of green-field land, for example by including a small area of previously used land within a substantially larger application site. Any extension onto adjoining land will only be acceptable where it represents a marginal addition to a site in the identified categories, and is otherwise acceptable in terms of the development plan. Any proposed take up of adjoining land must be a minor element of the full proposal.
- 5.7.13 To maintain operational flexibility in the context of the current rapid changes in the waste management industry, the WPA will not *require* all waste management activities to be located on integrated sites at this time. Such a move would not be appropriate given that a network of waste management facilities already exists, which will need time to adapt to the new priorities of local, national and European waste policy. Nonetheless, all proposals will be required to demonstrate functional integration, as outlined above.

5.8 Non-inert Waste Transfer and Recovery of Materials

<i>Policy number</i>	<i>Topic</i>
W 9.—	Waste Transfer and Materials Recovery Facilities
<p>Proposals for waste transfer / materials recovery operations will be permitted in the following locations, provided that they are intended to serve an identified need that cannot be met by existing facilities.</p> <ol style="list-style-type: none"> 1. Within an industrial area or land allocated for industrial (B2) use; or 2. Within the area and for the duration of an existing planning permission for a waste related use; or 3. Within the area and for the duration of an existing planning permission for minerals extraction; or 4. Within areas of despoiled, contaminated or derelict land. <p>Proposals for waste transfer / materials recovery operations in areas other than as listed above will be only permitted if it can be demonstrated that:</p> <ol style="list-style-type: none"> a) they serve an identified local need which can not be met by existing facilities, and; b) 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. 	

~~5.8.1 National and European waste policies place considerable emphasis on recovery of materials from waste. The waste hierarchy indicates that where waste cannot be minimised at source, materials recovery is to be regarded as the waste management technique of choice. The Bedfordshire and Luton planning authorities support this approach, and will expect materials recovery to take precedence over other methods.~~

~~5.8.2 Non-inert materials recovery is generally associated with waste transfer operations. Therefore, this section considers the future requirements for materials recovery in conjunction with projections for overall non-inert waste transfer capacity. Facilities for dealing only with inert wastes present different planning and operational considerations and are thus considered in a subsequent section (although it is recognised that non-inert sites may also handle an element of inert waste).~~

~~5.8.3 In accordance with the overall waste strategy, waste transfer and materials recovery facilities will only be permitted in the plan area to a total capacity level sufficient for handling wastes arising within Bedfordshire and Luton. Proposals involving significant imports of untreated waste to the plan area for transfer / materials recovery operations will not be supported as it is expected that such facilities will be developed in the source areas. However, some flexibility will be retained to allow local cross-border waste movement in accordance with the proximity principle.~~

Current provisions and projected need for waste transfer and materials recovery facilities

- 5.8.4 — There are currently 10 waste transfer sites operational in the plan area that are also capable of segregating non-inert wastes for recycling. These sites are split into two main groups, with 3 stations serving the Bedford / Kempston urban area, and 5 serving the Luton / Dunstable / Houghton Regis area. Two smaller sites provide transfer / recycling capacity in the more rural Mid Bedfordshire area, although only one of these is operational at time of writing.
- 5.8.5 — Data collected for year 2000 indicate that this network of waste transfer / materials recovery facilities has a total waste handling capacity of 844,000 tonnes p/a, with actual waste throughput for year 2000 of 553,000 tonnes.
- 5.8.6 — By way of comparison, the 1998/99 survey indicated total waste stream in the plan area of some 620,000 tonnes⁴. This figure includes 65,000 tonnes of Civic Amenity Site Waste, which may be excluded as it is functionally separate from the main waste streams, being segregated on-site with residuals transported straight to landfill. This leaves 555,000 tonnes of 'mainstream' waste arising, which is comparable to the recorded waste transfer throughput figure. This indicates that the majority of local wastes are currently handled via transfer facilities rather than being sent direct to disposal.
- 5.8.7 — It is therefore assumed for planning purposes that most wastes arising in the plan area will be managed in the first instance via a transfer station, prior to final dispatch for disposal or reprocessing. Indeed, this approach will be encouraged, as use of transfer / materials recovery facilities affords maximum opportunity for segregation of wastes for recovery purposes, as well as transport efficiency gains from bulking-up of materials.

Transfer Capacity

- 5.8.8 — Projections for all local wastes indicate a maximum combined transfer capacity requirement of 800,000 tonnes p/a by year 2015. Given that this figure is lower than the combined capacities of facilities already established it appears that, over the whole plan area, sufficient capacity already exists to service the overall forecast need.
- 5.8.9 — However, this overall figure masks differences in the levels of provision between different parts of the plan area. In the Luton / Dunstable / Houghton Regis area, data indicate that in year 2000 the existing transfer stations operated at only 53% of their combined maximum capacity, with some 237,000 tonnes of unused capacity. By contrast, in the same year stations in the Bedford / Kempston area were operating at 87% of maximum capacity (with around 44,000 tonnes spare). The local centres of Biggleswade, Leighton Buzzard and Ampthill / Flitwick currently have little or no provision, with only one small facility near Biggleswade.

⁴ This excludes the SWMA estimate for commercial and industrial wastes recycled (c167,000 t in 1998/99). Such materials are directly recovered, without entering the main waste stream and are thus not regarded as normal 'wastes' for analytical purposes.

5.8.10 — It is therefore considered that additional transfer sites are unlikely to be required in the south of the plan area over the plan period, whilst the northern and central areas are likely to face a shortfall of capacity. In order to avoid over-supply of facilities the WPA will expect spare capacity at existing facilities to be taken up prior to development of any new sites, particularly in the Luton / Dunstable / Houghton Regis area.

Materials Recovery Capacity

5.8.11 — For locally arising municipal wastes, projections indicate requirements for materials recovery capacity rising to a minimum of 184,000 tonnes p/a by 2015 (see 5.4.25). This figure is based on achievement of the 33% materials recovery target of the National Waste Strategy, and higher rates may be achievable in practice.

5.8.12 — For local commercial and industrial wastes, the projections only identify overall targets for landfill diversion and do not differentiate between materials recovery, energy recovery or other treatment processes. The required additional diversion capacity rises to some 312,000 tonnes p/a by 2015 (see Table 7).

5.8.13 — It is unlikely that the full diversion of commercial and industrial waste from landfill will be achievable by materials recovery alone, particularly as the 1998/99 SWMA indicates a relatively high (c38%) established level of commercial and industrial recycling. For modelling purposes it is assumed that of the additional 312,000 tonnes required diversion capacity, 50% will be by materials recovery, 50% by energy recovery or pre-landfill stabilisation treatment. This approach gives an indicative target for commercial / industrial materials recovery of 69% by 2015, and is in accordance with the strategic priority given to materials recovery as the preferred method of achieving landfill diversion.

5.8.14 — The above projections indicate that a maximum total materials recovery capacity of 311,000 tonnes p/a will be required for the plan area by 2015. The level of current materials recovery capacity is hard to establish, but data indicates a range between 60,000 tonnes p/a (the recorded 2000 recovery figure), and around 370,000 tonnes p/a (based on current transfer capacities, and assuming 33% MSW recovery and 50% commercial / industrial recovery).

5.8.15 — Thus, the figures indicate that sufficient overall materials recovery capacity exists (or could be developed) at existing transfer facilities. However, the same north-south imbalance in the distribution of available capacity is evident, with proportionately more in the south of the plan area. Table 12 shows the division between capacities and recorded throughput for the various areas.

Table 12.

Comparison of available supply and current demand for waste transfer and materials recovery facilities at major urban centres.

	Proportion of available transfer capacity	Proportion of available materials recovery capacity	Proportion of actual waste received year 2000
Bedford / Kempston area	39%	34%	51%
Luton / Dunstable/ Houghton Regis area	60%	64%	48%
(other areas)	1%	2%	1%
Total Values (tonnes)	844,000	60,000 – 370,000 (possible range)	553,494

Notes:

Available materials recovery capacity indicates assumed maximum potential based on MSW recovery at 33%, and commercial recovery at 50% of total available throughput capacity

- 5.8.16 It is therefore considered that sufficient materials recovery capacity exists, or can be developed, at existing sites serving the Luton / Dunstable/ Houghton Regis area, at least in the short-medium term. The WPA will therefore expect unused capacity at existing sites to be fully exploited before any further sites are permitted in this area.
- 5.8.17 In the Bedford / Kempston area additional capacity is likely to be required sooner, both for transfer and materials recovery. The WPA will therefore support development of additional facilities in this area in proportion to projected need and in accordance with other policies of this plan.
- 5.8.18 The WPA will also support development of facilities to serve the areas of Biggleswade and Leighton Buzzard, which currently have little or no provision.
- 5.8.19 Projections and current capacities for the two main urban areas are shown in Table 13. These figures are indicative only, and in particular the derivation of existing materials recovery capacity may over-estimate achievable performance. Nonetheless, the figures usefully illustrate the difference between the northern and southern urban centres in projections of need for development of further waste transfer and materials recovery facilities.

Table 13.

Indicative projections for materials required materials recovery capacity in 2015

All figs in tonnes per annum	Projected materials recovery requirement for year 2015	Existing materials recovery Capacity	Projected shortfall / surplus for year 2015
North	173,554	124,086	-49,468 (shortfall)
South	163,345	238,424	75,079 (surplus)

Notes:

Projected materials recovery requirement based on 33% MSW recovery, with allowance for 50% C+I recovery; with north / south split based on recorded waste handled in year 2000. Existing materials recovery capacity indicates assumed maximum existing potential based on MSW recovery at 33%, and commercial recovery at 50% of total available throughput capacity.

5.8.20 The above capacity requirements are based on long-term projections, and should therefore be regarded as indicative only. Actual waste arising, and its means of management / disposal will be closely monitored, and the projections modified accordingly. Thus, the WPA's in Bedfordshire and Luton will adopt a 'plan, monitor, manage approach' in making provision for future facilities.

5.9 Household Waste Recycling Centres (HWRCs)

Policy number	Topic
W 10.	Household Waste Recycling Centres
Proposals that develop and enhance the network of Household Waste Recycling Centres will be permitted.	

5.9.1 Household waste recycling centres provide a valuable waste disposal facility for many households. These facilities were originally conceived as *Civic Amenity Sites* in order to provide a route for households to dispose of bulkier items such as furniture, carpets and garden waste. More recently, there has been a change of emphasis in management of the sites in order to achieve a shift from a disposal orientated service towards more efficient segregation and recovery of materials. This development will continue, and the HWRCs will be expected to make an increasing contribution towards MSW materials recovery targets in the future.

5.9.2 There are existing sites within the plan area at the following locations:-

- (i) Bedford
- (ii) Ampthill
- (iii) Biggleswade
- (iv) Dunstable
- (v) Leighton Buzzard
- (vi) Luton

5.9.3 All these sites are operating at, or close to, their current operational capacities. In order to maximise materials recovery potential and cater for growth in demand, it is anticipated that the existing sites will be developed to enhance their operational capabilities.

5.9.4 Notwithstanding development of existing sites, it is apparent that additional HWRC capacity will be required over the plan period to serve the existing major urban centres of Bedford and Luton, and possibly other parts of the Plan area. The future need and appropriate scale of provision for HWRC development in Bedfordshire will be identified in the emerging Municipal Waste Management Strategy. An increase in the network of HWRC sites will therefore be supported in accordance with the agreed strategies. A new site for Progress Way, Luton has already been granted planning permission (March 2001), and opened in August 2004.

5.9.5 In the 1996 MWLP a preferred site was identified between the A421 and the railway line, close to the Interchange Retail Park. Although this site was subsequently granted planning permission, it was never actually developed. This site is now unlikely to be developed, and is therefore not carried forward as a proposal in this plan.

5.10 Composting

Policy number	Topic
W 11.	Composting
<p>Proposals for composting facilities will be permitted in the following locations:</p> <p>a) Within the area and for a period not exceeding the duration of a planning permission for a waste related use (including sewage treatment works); or</p> <p>b) Within the area and for a period not exceeding the duration of a planning permission for mineral extraction; or</p> <p>c) Within areas of previously despoiled, contaminated or derelict land; or,</p> <p>d) On agricultural land; or,</p> <p>e) For enclosed systems only, on land identified for general industrial (B2) use.</p>	

5.10.1 In terms of the waste hierarchy, the National Waste Strategy affords composting a similar status to that of materials recycling. In effect, composting is considered as the *recycling* of organic waste fractions, in order to produce a useful soil improver.

5.10.2 This is to be distinguished from cruder biostabilisation treatments, which may be employed as a pre-treatment for landfill waste, thus making the waste less putrescible (and therefore less polluting), and also reducing the weight and volume of waste, and hence the need for landfill voidspace.

5.10.3 For the purpose of this plan, the term *composting* is used to describe only those biodegradation processes which generate a useful end-product. Pre-landfill biostabilisation treatments are considered separately in association with other final disposal techniques (see policy W 15). Restrictions on where composted waste can be deposited, which depends on the nature of the feedstock, are covered in the Animal By-Products Amendment Order (2001). Technical guidance is available from the Environment Agency and the Composting Association⁵.

5.10.4 Composting activities that generate soil improving products may be classified under three general headings:

⁵ The EA document, "Technical Guidance on Composting Operations" (published 2004) may be viewed on the internet at: http://www.environment-agency.gov.uk/netregs/processes/636862/?version=1&lang=_e
For Composting Association guidance see http://www.compost.org.uk/dsp_home.cfm

1. Home composting
2. Outdoor centralised composting (open windrow)
3. Enclosed centralised composting (enclosed windrow or in-vessel)

5.10.5 Home composting is actively promoted in the plan area at present. In addition, there has recently been a significant increase in centralised green waste composting capacity in the Plan area, with seven open-windrow sites providing a total of 86,000 tonnes of permitted capacity (as at June 2004).

5.10.6 The WPA will encourage development of composting facilities for the management of local wastes up to a level compatible with the combined indicative materials recovery / composting capacities presented in Table 11. Composting facilities intended for imported regional wastes will not be permitted in the plan area.

5.10.7 Each class of composting activity has particular land-use implications, and these are described below.

Home composting

5.10.8 Composting domestic waste at the home can be the most effective technique for dealing with household biodegradable wastes. The process enables household biodegradable wastes to be taken out of the collected municipal waste stream altogether, thus making it the most cost effective method of all. Further, home composting enables households to take full responsibility for managing an element of their own waste at source, which is in complete accord with the principles of sustainable development.

5.10.9 All local authorities in the plan area support home composting by provision of subsidised composting bins, together with advice on their appropriate use.

5.10.10 There is little that the MWLP can do in terms of land-use policy to promote home composting in existing households, but the WPA recognises the value of the activity and will encourage district planning authorities to consider, where appropriate, requiring the provision of home composting bins in new housing developments, in line with the provisions of policy W 5.

Outdoor centralised composting

5.10.11 Although home composting is the most desirable solution for management of household biodegradable waste, not all households have sufficient garden space to undertake this activity.

5.10.12 An alternative technique is to gather biodegradable wastes for composting at a centralised facility, and the open-air windrow method is the simplest method of doing so.

5.10.13 Open air windrow composting has potential to release odours and bio-aerosols, and is thus best suited for dealing with "green" wastes, such as garden wastes, rather than potentially more problematic kitchen and food wastes, which may contain animal products and generally require more robust process control. In any event, the process must be carefully

managed, with regular turning of the windrows to maintain aerobic conditions and minimise odour impacts.

~~5.10.14 Being relatively low cost, open windrow composting may be particularly suitable for small scale and community-based operations. Such operations enable communities to co-operate in locally composting their own waste, and are close to home composting in terms of sustainability. The WPA will give support to such community-based activities. Similarly, open windrow composting can be an ideal activity for farm diversification, and the WPA will give favourable consideration to suitable on-farm proposals. Farm locations may also be suitable for enclosed systems, but it is anticipated that the high capital expenditure involved will result in few, if any, proposals coming forward.~~

~~5.10.15 For larger scale operations, the open windrow technique is now generally being superseded by enclosed windrow or in-vessel containment systems, which afford greater control of process and emissions. Nonetheless, for segregated green wastes the open windrow technique may still be an effective solution.~~

~~5.10.16 The *Waste Strategy for Bedfordshire and Luton* identifies separate kerbside collection of organic wastes as a priority. In the first instance this will focus on collection of garden ('green') wastes rather than more general mixed organic waste. The WPA will support appropriate development of open-windrow centralised composting facilities for management of collected green wastes, provided adequate environmental controls can be achieved.~~

Enclosed centralised composting

~~5.10.17 For composting of mixed organic wastes, only an enclosed windrow or in-vessel system is likely to be capable of achieving sufficient process control. As the capital costs of such facilities are comparatively high, it is envisaged that enclosed or in-vessel systems will need to be relatively large in order to be cost-effective. The WPA will support development of such facilities in proximity to the main urban areas of Bedford / Kempston and Luton / Dunstable / Houghton Regis.~~

5.11 Anaerobic Digestion

<i>Policy number</i>	<i>Topic</i>
W 12.—	Anaerobic Digestion
<p>Proposals for anaerobic digestion facilities will be permitted in the following locations:</p> <p>a) Within the area of an existing planning permission for a waste related use (including sewage treatment works); or</p> <p>b) On land identified for general industrial (B2) use.</p>	

5.11.1—Anaerobic digestion (AD) is a well established biological degradation process that takes place in an oxygen-free environment. The technology is more commonly utilised in the UK for the treatment of sewage sludge, but also has potential for handling biodegradable solid wastes. There is also potential for 'co-digestion' of solid wastes with sewage sludge.

5.11.2—In terms of land-use implications, AD is similar to in-vessel composting systems: both being essentially industrial (and capital intensive) engineered facilities. The major difference is the potential for energy recovery from the AD process gases (typically around 65% methane), which requires additional plant.

5.11.3—The AD process results in production of a residual 'digestate', which may be suitable for further treatment and beneficial use. The quality of digestate, and hence the range of possible end-uses, is dependant on the degree of quality control over the process inputs. Where a source-segregated biodegradable feedstock is free of contamination, the digestate may be treated by composting and used as a soil improver. Where the feedstock is contaminated, for example by heavy metals, the digestate may only be suitable for landfill. It is important, therefore, to consider how any AD proposals will integrate with existing and planned waste collection systems in order to secure the appropriate feedstock.

5.11.4—At time of writing, planning permission has been granted for for one AD plant in the Plan area. The plant itself is yet to become operational, but is intended to process around 20,000 cubic metres per year of mixed farm, food and green wastes. The WPA is keen to encourage development of further for treatment of local wastes, particularly where existing sewage treatment plant may be adapted to handle biodegradable solid wastes. Proposals for AD treatment of regional wastes will not be permitted.

5.12 Energy Recovery Plant

Policy number	Topic
W 13.—	Energy Recovery Plant
	<p>Planning permission will be granted for proposals for energy recovery or refuse-derived fuel production facilities only where they are part of an integrated waste management system in which priority is given to recovery of materials.</p> <p>Proposals which meet the above criterion will be permitted at the following locations:</p> <ul style="list-style-type: none"> (i) As part of an integrated waste management facility, or; (ii) Within the area of an existing planning permission for a waste related use, or; (iii) On land designated for general industrial (B2) use, or; (iv) Within areas of previously despoiled, contaminated or derelict land. <p>Proposals for thermal waste treatment will be expected to consider the potential for, and implement where practical, combined heat and power (CHP) capability.</p> <p>Proposals for thermal waste treatment without recovery of energy will not be permitted.</p>

5.12.1—~~Whilst energy may be recovered from waste via (for example) utilisation of gas from landfill or anaerobic digestion, this policy applies specifically to bespoke thermal treatments such as incineration, pyrolysis and gasification.~~

5.12.2—~~Facilities for recovery of energy from local wastes will be an essential element in achieving the core aims of the waste strategy. Whilst materials recovery takes priority in the waste hierarchy and this Plan, it will not be practical to recover all waste by recycling and some 'energy from waste' (EfW) capability will be required in order to treat such wastes as cannot practically be recycled or composted, and thus to arrive at a fully integrated waste management solution. However, waste management systems that are based solely or primarily on energy recovery will not generally be the most sustainable solution. The WPA will not support EfW proposals unless they form part of an *integrated* system, in which priority is given to materials recovery.~~

5.12.3—~~Incineration or other thermal treatment without energy recovery offers little or no advantage over landfill and will not be supported.~~

5.12.4—~~Technologies for recovery of energy from waste are rapidly evolving. Until recently, the only commercially viable method for handling mixed waste has~~

been some form of mass-burn incineration. Newer technologies such as *pyrolysis*, which converts waste to a fuel gas in an oxygen-deficient environment, and *gasification*, which is similar but operates in the presence of air or steam, offer potential for enhanced pollution control together with commercial viability at smaller scales of operation. A further approach is the treatment of mixed waste to produce *Refuse Derived Fuel* (RDF), which may then be used as fuel feedstock for a variety of industrial processes. RDF is also a more efficient feedstock for EfW incineration than crude mixed waste.

- 5.12.5 — Given the current rapid changes in development of various energy recovery technologies, it is not considered appropriate for the MWLP to be overly prescriptive as regards preferred technical approaches. Therefore this plan identifies indicative capacity requirements, together with general parameters for process integration and BPEO, but does not attempt to specify precise technologies.
- 5.12.6 — The projected capacity requirements for all alternative treatments to deal with non-recycled waste are shown in Table 7 (commercial and industrial wastes) and Table 11 (municipal wastes). These figures indicate the maximum projected residual waste levels that may remain once minimum recycling targets are met, and refer to all possible alternative treatments, not just thermal energy recovery techniques. In practice all efforts should be made to ensure materials recovery is taken to the maximum practical extent before recourse to EfW technologies. The municipal waste projections indicate a maximum potential alternative process capacity, after the minimum recycling targets are met, of around 307,000 tonnes p/a by year 2015. The corresponding commercial / industrial waste figure of c312,000 tonnes p/a by 2015 applies to the total required landfill diversion, to be achieved via materials and/or energy recovery. To ensure that EfW does not 'crowd-out' commercial / industrial materials recycling a maximum upper limit of 50% energy recovery from commercial / industrial wastes is assumed for the purposes of this plan.
- 5.12.7 — Application of the strategic approach with the above projections indicates that, with projected growth rates in wastes arising, a maximum potential combined EfW / RDF capacity for all local wastes of around 450,000 tonnes p/a may be required by year 2015. However, the WPA does not believe that it would be appropriate to develop this full capacity at the outset of the plan, as such an approach would run the risk of over-provision and 'crowding-out' of recycling options should waste growth rates prove lower in practice than modelled, or should higher recycling rates prove viable. The WPA will therefore adopt a 'plan, monitor, manage' approach to provision of EfW capacity, employing the projections in Table 7 and Table 11 as the base for monitoring, and only allowing sufficient EfW capacity to facilitate treatment of post-recycling residual wastes actually proven at the time of application. "Predict and provide" applications, in which a large part of capacity is intended for treatment of a theoretical increased levels of wastes at some future time will not be supported.
- 5.12.8 — Under the proximity principle, EfW / RDF facilities should be located close to major sources of waste. The WPA will therefore support the development of capacity for direct energy recovery or production of RDF from municipal and commercial / industrial wastes in location(s) which can serve the main urban areas.

- ~~5.12.9 The WPA will not specify precise technologies to be deployed, nor the number or size of individual facilities, but will require in all cases demonstration that proposals represent the BPEO. Given the major and industrial scale of EfW / RDF facilities, it is expected that they will be developed as part of fully integrated sites, which include capacity for materials recovery and/or other waste management plant. Similarly, any EfW plant could have capability to manage commercial / industrial wastes together with municipal, thus taking advantage of economies of scale and the ability to underwrite investment in open-market EfW capacity with the security of guaranteed municipal contracts. Joint C&I / MSW EfW capacity would also promote the integrated strategy and landfill diversion targets of this Plan, and the WPA will therefore encourage such joint provision wherever practical.~~
- ~~5.12.10 Under the Renewables Obligation Order 2002, biodegradable wastes of plant or animal origin may be utilised as a biomass fuel, which will count towards the electricity generation companies' obligation to provide a proportion of electricity supply from renewable energy sources. However, for an energy plant to be eligible under the Order, no more than 2% of the total energy content of its fuel feedstock may be in the form of fossil-fuel derived elements such as plastics. In this light, where an EfW proposal can utilise a 'clean' segregated biodegradable waste stream, which is largely free of contamination from fossil fuel derived products, there will be a clear potential to contribute simultaneously to national policies for both waste management and renewable energy generation. The WPA considers such 'joined-up' planning to be in line with the principles of sustainable development, and will encourage proponents of EfW plant to investigate the feasibility of securing appropriately segregated waste streams, possibly in combination with other eligible biomass fuels, in order to become eligible under the Order.~~
- ~~5.12.11 The WPA will also encourage proposals to consider the potential for development of combined heat and power (CHP) capability, which has potential to considerably increase overall process efficiency, and may also provide a useful (and marketable) resource for co-located developments.~~
- ~~5.12.12 Energy from waste plants tend to be one of the most controversial forms of waste related development. It is likely that any proposal for such a plant would attract considerable opposition unless extensive pre-application consultation and community involvement were undertaken to minimise the sort of misunderstandings and misinformation which are typically associated with such development. There can thus be long lead-in times associated with such development. Potential developers are therefore encouraged to engage in pre-application discussions with the WPA at the earliest opportunity, and to take a comprehensive and pro-active approach to community consultation.~~

Specialised thermal treatments

- ~~5.12.13 Policy W 13 applies to general commercial, industrial and municipal wastes. The need may arise, however, for specialised thermal treatment facilities for management of particular wastes which cannot reasonably be managed by other means. Examples of such situations could include incineration plant for disposal of animal by-products or plant for treatment of particular hazardous wastes. Proposals for such specialised facilities will be~~

considered on their merits against the policies of this plan, but will only be supported where it can be demonstrated that they are the best practicable means of dealing with the particular wastes for which they are intended. In all cases, proposals which involve significant imports of waste from outside the plan area will be resisted.

5.13 Non-inert Landfill

<i>Policy number</i>	<i>Topic</i>
W 14.—	Non-inert landfill provision
Planning permission will only be granted for proposals for non-inert landfill provided that it can be clearly demonstrated that the landfill provision is required to meet an identified need which cannot be met by the treatment of waste higher up the waste hierarchy.	

5.13.1 Notwithstanding the central strategic aim to reduce landfill to a practical minimum under the projected capacity modelling outlined in section 5.2, there will remain a considerable demand for putrescible landfill voidspace in the plan period. This will occur for the following reasons:

- The plan period covers a transitional phase, during which the current landfill-dominated practice is to be replaced by more sustainable methods. Whilst this transition is ongoing there will remain a (reducing) need for landfill, for both local and imported wastes;
- Alternative waste management processes will still produce residues, which will require landfill. A continuing provision will be required for landfill of process residues from the Greater London area.

5.13.2 The projections of landfill need for imported and local wastes are shown in Table 6, Table 7 and Table 11. Together, these projections indicate a total non-inert landfill requirement of 18.19 million cubic metres (mcm) over the period 2004–2015 (inclusive).

5.13.3 There are currently three operational landfill sites in Bedfordshire capable of taking biodegradable wastes. Two sites, Stewartby (otherwise known as 'L' Field) and Brogborough are located in the Marston Vale clay fields, the third (Arlesey) is sited in a former clay pit to the south of Biggleswade. As at January 2004, these sites had a combined capacity sufficient to accept 6.86 million cubic metres (mcm) of waste. The planning permission for landfill at Brogborough expires in 2008, whilst that at Arlesey expires in 2010. The planning permission at Stewartby is not specifically time-limited, but it is estimated that the site will be full around 2014.

~~5.13.4 Using a 1:1 tonnes per cubic metre conversion rate⁶, a projected shortfall of some 11.33 mcm non-inert landfill voidspace therefore exists over the plan period.~~

~~5.13.5 Government guidance, as set out in PPG 10, states that waste local plans should, where possible, identify specific site allocations to meet the projected need for waste management facilities, including landfill sites. At the present time, however, it has not proved possible to identify specific landfill site proposals in this plan as there are a number of outstanding areas of uncertainty, which must be addressed before a final assessment of landfill need and potential sites can be made. The following items are of particular significance;~~

~~● **Regional development context:** Whilst the Marston Vale has for some time provided landfill resources to serve needs of London and the previous south east region, it has now also been identified as a potential major growth area under the proposals of the Milton Keynes and South Midland Sub-regional Study (MKSMSRS). The MKSMSRS has recently (spring 2004) undergone Examination in Public, the findings of which will inform the emerging regional planning guidance for the East of England Region, RSS 14. Major landfill activity has potential to conflict with the growth area proposals, and as both matters have significant regional (and inter-regional) dimensions, these issues must be addressed in the context of RSS rather than the local planning framework. In this context, the capacity modelling set out in this Plan, as based on the modified SERP 160 approach, must be regarded as an interim approach. The final strategic approach and resultant landfill need assessment must be informed by the guidance of RSS14. It is anticipated that RSS 14 itself will be subject to Examination in Public in mid 2005, with the final version adopted in late 2006.~~

~~● **Tonnes / cubic metre conversion factor for landfill:** Landfill void capacity is measured by volume (cubic metres), whilst the waste to be deposited is measured by weight (tonnes). It is therefore necessary to derive a conversion factor to enable an assessment of landfill need to be translated from anticipated tonnes of waste to the size of landfill void required to accommodate disposal. The assessment of need in this Plan is based on a conversion factor of 1:1, as employed in the current East of England Regional Waste Management Strategy. Recent empirical evidence, however, as derived from local survey work, indicates that the three currently active non-inert landfill sites in Bedfordshire are actually accommodating waste inputs at an average conversion rate of 1.2 tonnes / m³. The derivation of this figure is set out in Table 14, below;~~

⁶ The 1:1 t/m³ conversion rate is a modelling assumption employed in the East of England Regional Waste Management Strategy.

Table 14.

Empirical derivation of landfill tonnes / cubic metres conversion factor				
(all figures from local survey, except for 2001 deposit (SWMA all beds fig))				
Void (all non-inert sites) (mcm)		Recorded deposits (million tonnes)		
start 2000 void	16.60	2000	3.20	
start 2001 void	14.10	2001	3.5	(SWMA)
start 2003 void	8.41	2002	3.15	
3-year take up	8.19	3-year deposit	9.85	
		equivalent tonnes/cubic metres	1.20	

If this conversion factor were to be applied to the landfill need assessment of this plan (i.e. 18.19 mt landfill waste and 6.86 mcm existing landfill void), then the resultant requirement for additional landfill void would be 8.30 mcm, i.e. 3.03 mcm less than that required under the 1:1 conversion factor.

However, the empirical 1.2:1 (t/m³) conversion factor is derived from operations at the three existing sites, all of which are relatively large and have been operational for a considerable period of time. Application of this factor to new sites with different operating conditions may not therefore be appropriate. Therefore, pending further investigations under the forthcoming LDF review, the 1:1 conversion factor is retained as an interim measure for the purposes of this Plan.

- ***The role of other strategic landfill sites in the regional disposal context:*** The role of other strategic landfill capacity in the South East and East of England regions requires examination in relation to assessing the BPEO for accommodating waste exported from the greater London area. This assessment will inform the forthcoming Plan review, as it will have a bearing on the voidspace need projections which are used (as an interim measure) in this Plan.

5.13.6 The WPA will work to resolve the above matters under the forthcoming Plan review, to be commenced in early 2005 under the new LDF format. This review will also aim to complete the assessment process by identifying and allocating specific sites for the full range of required waste management facilities, including landfill, via an objective BPEO assessment of all options. Pending completion of this process, applications for new landfill sites or extensions to existing sites must clearly demonstrate an identified need, and will be determined against the strategic framework as set out in this Plan. It should also be noted that at the public local inquiry into the deposit draft of this Plan, the Inspector considered that “it would not be appropriate to permit any additional landfill capacity in Bedfordshire until a thorough assessment has been made of both the need for such capacity to be provided and the means by which that need should be provided”. The WPA will have regard to this when considering any proposals for non-inert landfill.

5.14 ~~Pre-landfill treatments for biodegradable waste~~

<i>Policy number</i>	<i>Topic</i>
W 15.—	Pre-landfill waste treatments
	<p>Proposals for pre-landfill waste treatments with no useful end-product will only be granted permission where no alternative treatment higher in the waste hierarchy is practical. Where no alternative may be found, pre-landfill treatment facilities will only be permitted in the following areas:</p> <p>a) Within the area and for a period not exceeding the duration of a planning permission for non-inert landfill or other major waste management facility.</p>

~~5.14.1 Under the EU Landfill Directive, the quantities of biodegradable wastes which may be landfilled in the UK as a whole must be progressively reduced to a level in 2020 not exceeding 35% by weight of that landfilled in 1995 (taking into account the four-year derogation in transposing Directive requirements into UK policy).~~

~~5.14.2 It is possible that this requirement may result in a need for a cruder form of biodegradation for certain wastes that are not capable of being composted to form a useful product. Such treatment would amount to a biostabilisation of wastes prior to landfill, and would have advantages in reducing the pollution potential of landfilled waste.~~

~~5.14.3 The Landfill Directive (Article 6) will also require all non-inert wastes to be subject to some form of treatment prior to landfill, and prohibit the landfill of untreated wastes. Again, this will lead to development pressure for a range of treatments. The Environment Agency will develop technical guidance on what will constitute acceptable treatment. For land-use planning purposes, it is not necessary to be specific or prescriptive regarding choice of treatment technology, and this policy will apply to all developments that propose pre-landfill treatments with little or no direct resource recovery.~~

~~5.14.4 Where practical, the WPA would prefer wastes which are not readily recyclable to be managed by thermal energy recovery treatments, and will only support crude pre-landfill treatments where no practical alternative higher in the waste hierarchy exists.~~

5.15 Landfill Gas

<i>Policy number</i>	<i>Topic</i>
W 16.—	Landfill gas
The County Council will encourage the extraction and use of gas from landfill sites. When sites are likely to generate significant quantities of landfill gas, a scheme for gas extraction will be required, which will also incorporate measures for utilisation of the gas wherever practicable.	

~~5.15.1 Landfill gas is a by-product of decomposing household and commercial waste. Methane is a major constituent and is potentially harmful, producing greenhouse effects as well as risk of explosion if uncontrolled. Risks can be minimised by collection and flaring of the gas and by controlling any nearby development. However, the gas can also be extracted and used beneficially. Extraction of landfill gas for electricity generation is to be encouraged both from environmental and safety considerations. Currently, landfill gas is used to generate electricity at all major landfill sites in Bedfordshire, with a combined generation capacity of 37.8 MW (sufficient to supply power for around 79,000 homes). Electricity produced is sold to the National Grid.~~

~~5.15.2 Significant quantities of landfill gas are likely to be generated from sites where disposal includes putrescible waste. In considering planning applications and schemes for such sites, the County Council will require that a scheme is devised and implemented to extract and use landfill gas generated at the sites wherever practicable. This requirement will not be applied to sites where only inert waste material is to be deposited since the generation of landfill gas from such sites is likely to be relatively small and an elaborate system for extraction and use of the gas would not be justified. However, even though an inert waste site is unlikely to produce landfill gas in any significant quantity, an appropriate passive venting system may still be required.~~

5.16 Landraising

<i>Policy number</i>	<i>Topic</i>
W 17.—	Land raising
Permission will not be granted for land raising using either inert or non-inert wastes unless there is a clear overall planning benefit arising from the proposal.	

~~5.16.1 The County Council does not regard the restoration of mineral workings by landfill as land raising so long as the levels of the site do not exceed those of normal doming or surcharging necessary for settlement and drainage. Any additional doming above this would be regarded as land raising, as would the disposal of waste onto land where no previous man-made excavation exists. In exceptional circumstances it may be advantageous to~~

undertake landraising where, for example, in conjunction with re-contouring this may present an opportunity for enhancement subject to the criteria of this plan.

5.17 Sewage Treatment Works and Management of Sewage Sludge

Policy number	Topic
W 18.—	Sewage Treatment Works
	<p>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.</p> <p>Provision for processing of sludge to produce beneficial end-products will be sought where appropriate, including co-treatment of sludge with other wastes.</p>

5.17.1—The Urban Waste Water Directive, which came into effect in 1998, prohibits dumping of sewage sludge at sea (hitherto a major method of disposal). This factor, together with continuing population growth and higher environmental standards, will result in an increased demand for development of sewage treatment facilities, together with alternative methods for management of sewage sludge. Currently, a majority of sludge is disposed of by 'land spreading' on agricultural land, as controlled by the Sludge (Use in Agriculture) Regulations 1989.

5.17.2—Sewage treatment works are constrained in terms of location by the need to be relatively close both to the populations they serve, and to water courses for discharge of treated waters. DoE Circular 17/91: *Water Industry Investment: Planning Considerations*, gives guidance to local planning authorities on the implications of investment programmes being undertaken by the water industry.

5.17.3—Proposals for new sewage treatment works will only be granted permission where it can be demonstrated that the need for development cannot be accommodated at an existing site, and the proposals are in accordance with the environmental protection policies of this plan. In particular proposals must demonstrate satisfactory controls for odour, together with adequate access arrangements and standards of design and landscaping appropriate for the vicinity in which they are proposed.

5.17.4—There is potential for utilising sewage treatment facilities for combined management of other organic wastes, particularly for co-digestion AD processes and combined composting operations. The WPA will encourage such development, and will expect proposals for new sites to investigate the potential for co-treatment of other organic wastes.

5.18 Clinical Waste

<i>Policy number</i>	<i>Topic</i>
W 19.—	Clinical waste incineration facilities
	<p>Facilities for thermal treatment of clinical waste will generally be acceptable at the following locations, provided such waste cannot be reasonably managed at an existing facility:</p> <p>a) At the site of a medical research establishment or hospital which is generating clinical waste;</p> <p>b) In conjunction with an installation used or proposed for thermal treatment of other wastes</p>

5.18.1— Clinical waste is generated by hospitals and other medical establishments, and includes such items as human and animal tissues, drugs, swabs and syringes. The nature of such wastes generally dictates incineration as the only safe disposal route. Clinical waste is often included in a more general category known as 'healthcare waste' which, although classed as 'special waste', also includes general solid waste which may not have hazardous properties. Hazardous waste is covered elsewhere in the plan. A survey of the three NHS Trusts in Bedfordshire and Luton indicates an approximate arising of around 1,290 tonnes per year⁷ from hospitals and clinics. Although the inclusion of clinical waste from schools, dentists, doctors and households would increase this figure slightly, it is clear that the overall tonnage is quite low. All clinical waste generated within the plan area is currently incinerated outside the county. Such plant is now regulated under the Local Air Pollution Control system, established by part 1 of the Environmental Protection Act 1990.

5.18.2— As incinerators for clinical wastes are essential facilities for safe disposal, the WPA will support development of such facilities where they are reasonably required for treatment of locally arising waste. Proposals for major (regional) facilities will not be supported.

5.18.3— Clinical wastes may be treated either at purpose-built plant installed in association with healthcare facilities that generate such waste, or at major incineration facilities which handle a wider range of wastes. Bespoke small-scale facilities for healthcare waste will not necessarily be required to recover energy from the incineration process.

⁷ This is an approximate figure given verbally by the 3 NHS Trusts in the Plan area. This figure does not include other wastes that arise from hospitals and clinics such as general, pharmaceutical, and hazardous.

5.19 Inert wastes

<i>Policy number</i>	<i>Topic</i>
W 20.—	Inert Waste Recycling
Planning permission will be granted for proposals for inert waste recycling at sites that accord with the criteria of policy W 9.	

<i>Policy number</i>	<i>Topic</i>
W 21.—	Inert Waste Landfill
The WPA will not grant permission for landfill or other disposal to land of inert wastes except where proposals contribute to the restoration of old mineral workings or provide a demonstrated environmental benefit.	

5.19.1 For planning purposes, inert wastes are generally treated separately, as their management requirements differ from other wastes. Currently, the choice amounts to simple landfill, use in engineering and landscaping works, or recovery for re-use. In general, principles of sustainability indicate that inert construction and demolition wastes should be re-used or recycled, and that secondary aggregates used where possible, as this reduces the need for finite primary mineral and soil resources. The MPA / WPA will encourage the re-use of material from construction projects when considering development proposals. Potential uses include preparation for development, for land restoration or site landscaping and, where appropriate, as recycled aggregates and building products within buildings and other structures in place of natural aggregates or other previously unused materials. Therefore, there normally will be a presumption in favour of the importation and subsequent processing of secondary and recycled aggregate, as long as there are no overriding detrimental environmental effects.

5.19.2 Precise data on inert wastes are notoriously hard to acquire as many management activities fall outside the normal waste licence reporting procedure. In conducting baseline research, it was estimated that the total inert waste arising in Beds and Luton has remained relatively constant in recent years, at around 585,000 tonnes per year. In 1998/99 it was estimated that only some 162,000 tonnes of this waste was directly landfilled, the remainder being recycled or used in landscaping and engineering works.

5.19.3 As of May 2004, Bedfordshire County Council had given planning permission for inert waste recycling facilities with a total capacity of 395,000 tonnes per year, with a further 190,000 tonnes pending completion of a section 106 agreement. Although some of this capacity relates to temporary permissions, it is considered that adequate provision is currently being made to cater for recycling of locally arising inert wastes (with the reservation that it may be necessary to replace or renew temporary

capacity). It is also desirable to establish a greater permanent capacity in order to promote market stability. Proposals for permanent inert waste recycling facilities will be supported if they accord with the criteria for recycling facilities as laid out in policy W 9.

~~5.19.4 In recent years, the quantities of inert waste that are landfilled in Bedfordshire have been steadily decreasing. This is largely a result of the landfill tax regime introduced in 1996. Until 1999, landfill tax was levied on inert waste sent to landfill, whilst inert materials recycled or used for landscaping activities were tax exempt. However, this system proved problematic nationally, leading to a proliferation of bunding and landscaping works with dubious purpose or need, whilst at the same time shortages in available material for restoration purposes was noted. Inert wastes used for landfill engineering and quarry restoration are now exempt from landfill tax, which should revitalise the supply available for these uses.~~

~~5.19.5 In terms of inert landfill, as of March 2001, there is voidspace capacity of 2.16mcm. It is clear that potential void capacity, including that associated with restoration of old mineral workings, is currently some way in excess of the supply of inert materials. Therefore there is no need to identify additional inert landfill sites at this time. Indeed, there is an apparent shortfall in inert materials required for implementation of existing restorations schemes at old mineral workings. Therefore use of inert wastes (which cannot be usefully recycled) in such restoration schemes will be prioritised in preference to new landfill, landscaping or bunding works. Landscaping or bunding works will only be permitted where a genuine need or environmental gain can be demonstrated.~~

5.20 Safeguarding of waste management sites

<i>Policy number</i>	<i>Topic</i>
W 22.	Safeguarding existing sites
	Existing and proposed sites for waste management will be protected as far as practicable from development that may conflict with or prejudice their waste management use.

5.20.1 Waste management operations, by virtue of their particular requirements and potential impacts, require careful site selection and are not easy to locate. When suitable sites are found they therefore require protection from other nearby development that may result in potential conflicts.

5.20.2 Existing and proposed waste management sites perform an essential role in servicing the needs of households, business and industry. The WPA will therefore seek to protect such sites from inappropriate neighbouring development, which may prejudice their continuing efficient operation. This will apply to landfill sites as well as other waste management operations.

6 GENERAL AND ENVIRONMENTAL POLICIES

This section sets out the general and environmental policies applicable to minerals and waste development within the Plan area. They explain the factors that will be considered by the MPA / WPA when considering the location and design of all minerals and waste applications.

6.1 *Matters to be addressed in planning applications*

<i>Policy number</i>	<i>Topic</i>
GE 1.	Matters to be addressed in planning applications
<p>In proposals for minerals and/or waste related developments, planning applications will be required to provide sufficient information to enable the planning authority to assess, where applicable, the following factors:</p> <ul style="list-style-type: none"> a) The need for the development in the national, regional and local context; b) Measures taken, or required, to ensure that any waste arising from the proposed development will be minimised and managed in the most sustainable way; c) The potential for minimising road transport, and for using transport other than roads for the carriage of bulk materials associated with the proposed development; d) The volume and nature of road traffic that would be generated by the proposed development, together with the suitability of the site access and of the local road network to accommodate identified traffic; e) Appropriate measures to prevent the deposit of mud or other debris on public highways from vehicles using the site; f) The effect of the development on the public rights of way network and on access to the countryside in general, including opportunities for enhancement; g) The effect on, and relationship to, nearby sensitive land uses by reason of noise, vibration, dust, odour, litter, pests, illuminations and any other emissions or impacts related to the proposed development; h) The nature and duration of any effects on the extent and quality of agricultural land, and of any other potentially disruptive effect on agriculture; i) The effect of workings on water resources, including water quality, drainage and flood risk; j) The impact of the proposed operations on the landscape, especially when in, or adjacent to, Areas of Outstanding Natural Beauty, Areas of Great Landscape value, or on areas used for recreational purposes; k) Any impact(s) on Sites of Special Scientific Interest, County Wildlife Sites, Regionally Important Geological or Geomorphological Sites, trees, woodlands, hedgerows and other sites of geological or wildlife interest; l) Any impact(s) on archaeological features, ancient monuments, buildings or other areas of architectural or historic interest, together with their settings; 	

m) That the restoration and aftercare of the site will be secured, and will enable an after-use appropriate to the site and its geographical context.

Applications for planning permission must include sufficient information to enable the MPA / WPA to assess the above factors. Planning permission will not be granted where information relating to the above criteria has not been provided where required.

- 6.1.1 We have carefully considered these issues in relation to Bedfordshire and Luton in order to safeguard the environment, whilst making an appropriate level of contribution to local and regional need for minerals sites and waste management facilities. Each of the above factors is covered by policies in this Plan. Issues of need are addressed and defined in the respective minerals and waste strategy sections, waste management issues associated with the development itself are addressed in policy W 5, whilst the remaining factors are addressed in specific policies in the GE series.
- 6.1.2 Applications for planning permission or related schemes will be required to consider the above factors that are relevant to the proposal. Where factors considered relevant by the MPA / WPA are not covered in the application, further information will be requested which could delay the outcome of the application. Applicants should also consider whether their proposed development requires an Environmental Impact Assessment (EIA) as specified in the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended). A formal notification (or "screening opinion") as to whether or not a proposal will require EIA may be requested from the MPA / WPA.
- 6.1.3 Most applications for minerals or waste development will involve some degree of negative impact on some aspect of the environment or other planning concern. Therefore, in assessing individual applications, the planning authority will have regard to the overall balance of impacts (positive and negative), as well as to any major 'single issue' impacts. This approach accepts that the final planning decision will be a balance of both positive and negative factors. The various factors to be considered will merit varying degrees of weight in arriving at an assessment of the net impact and in determination of the planning application. To give a guide as to these relative weightings, the policies of this Plan are cast in terms in which absolute prohibition of development is restricted to only those factors that are of such weight that a proposal causing significant harm to the interest concerned would be regarded as a plan departure. Such factors include compliance with the strategic aims and projections of the plan. Thus, for example, a proposal which contravened the strategic projections of waste management capacities would stand to be refused permission. Other factors, as covered by the GE series of policies, are afforded appropriate weight in their respective policies.
- 6.1.4 In determination of applications, the planning authority will have regard to the overall balance of impacts, including the need for the development as assessed in the context of the strategic projections of this Plan. Thus, the key consideration will be whether the sum total of negative impacts is offset by the sum total of planning benefits, including need for the proposed development. With the above hierarchy of protection, the degree of compensatory planning benefit required to justify grant of planning

permission in cases of adverse impact will vary according to the significance of the protected factor.

6.1.5 It is the responsibility of the applicant to clarify what impacts potential development will have on land, and how they plan to mitigate or manage them. In certain circumstances, the characteristics or location of proposed development dictate that an Environmental Impact Assessment is required. This approach, while essential, has limitations when it comes to looking at off-site activities and site enhancement. An emerging method for assessing the potential impacts of development is the Quality of Life (QoL) Capital Approach. It is a new decision making and management tool developed by the Countryside Agency, English Nature, English Heritage and the Environment Agency. Although still in the development stage, it ultimately hopes to be a consistent and integrated way of assessing the environmental, social and economic benefits, services and consequences to human beings of a particular proposal(s) or area(s) of land. This approach considers the benefits and services of each particular aspect of the proposal or area being considered regardless of any designations. To give a simple example, if the habitat of a fairly common species were easily accessible to members of the public, whereby other areas where the species is present are not, then this would be providing a benefit and service to humans. It will then need to be established:

- Who the benefit / service matters to, and at what scale (local, regional etc)
- How important it is
- Whether we have enough of them, and
- What (if anything) could make up for the loss or damage to the service?

6.1.6 This may warrant preservation of that particular site, or relocation of that particular benefit elsewhere (i.e. making a nearby site accessible to the public). The overall aim is to maintain or increase the benefits and services on offer, and identify where they are lacking. At present it has only been used to assess environmental benefits and services, and projects that consider economic and social aspects are still underway. The cumulative effect of damage to the environment and amenity value must also be taken into consideration in applications for planning permission, and the QoL approach may prove to be a good way of assessing this. This approach may prove to be a valuable tool for developers and the MPA / WPA in assessing potential proposals and sites on both designated and non-designated sites and its use is encouraged.

6.2 Restoration / improvement of Marston Vale

Policy number	Topic
GE 2.	Restoration / improvement of Marston Vale
<p>All mineral and waste proposals in the Marston Vale should contribute to the improvement of the environment of the Vale. Proposals must demonstrate how they will assist in achieving the aims and objectives of the Forest Plan.</p> <p>In particular:</p> <p>a) The County Council will ensure that the restoration of clay workings in the brickfields takes place in a reasonable timescale. In respect of already worked out areas the County Council will therefore support proposals that are in general accordance with MWLP policies, will hasten restoration and which will produce significant environmental improvements.</p> <p>b) Proposals for new, extended or replacement brick manufacturing works will be expected to have an improved appearance, a reduced environmental impact, and in particular a marked reduction in the level of polluting emissions in comparison with the existing works.</p>	

- 6.2.1 The Marston Vale is seen as a significant resource for the county. The extraction of clay for brick making and the subsequent use of the voids created for waste disposal are of continuing regional significance. Whilst these activities are currently less intensive than in previous years, they will continue to influence the environment of the Vale beyond the current plan period. The recently adopted Waste Strategy for Bedfordshire and Luton advocates a move away from disposal to landfill for both local and imported waste. This will have implications for the way pits in the Marston Vale area are restored as major landfill will be contrary to the aims of the Strategy. Restoration needs to be achieved within a reasonable timescale, although it should be recognised that this will vary from site to site.
- 6.2.2 The Marston Vale is identified as a strategic corridor in the Structure Plan to accommodate housing, employment and leisure. These pressures have to be considered in addition to the major minerals and waste issues for the Vale, in particular the potential for the modernisation of the brick industry, the restoration of current sites, and the need for, and scale of, further development. This area will be subject to increased pressure from development in the future, the full extent of which is currently under discussion as part of the preparation of new regional planning guidance.
- 6.2.3 The Forest of Marston Vale (formerly Marston Vale Community Forest) is one of twelve Community Forests in England, all part of a national programme by central government to restore areas of degraded landscapes close to centres of population. The Forest of Marston Vale is a joint initiative of Bedfordshire County Council, Mid Bedfordshire District Council, Bedford Borough Council, the Countryside Agency and the Forestry Commission. Established in 1991, the Forest of Marston Vale covers 61 square miles,

stretching from the urban fringes of Bedford and Kempston down to the M1 motorway, and from the Greensand Ridge in the east to the Clay Ridge and county boundary in the west (see appendices). The aim of the Forest of Marston Vale is the environmental, social and economic regeneration of the Marston Vale, primarily through increasing tree cover from 3% (as in 1991) to 30% by 2031 to create a well-wooded framework within the landscape. Minerals and waste activities within the Community Forest offer restoration opportunities for significant woodland creation, the realisation of which are acknowledged as important in order to deliver the Forest Plan's landscape, wildlife and recreation objectives. The circumstances in which these benefits may reasonably be sought are defined in Government guidance, (DoE) Circular 1/97 and MPG 2). In the light of this guidance, the County Council will seek contributions to the work of the Trust through Section 106 Planning Agreements in appropriate cases. The aims and objectives of the Forest Plan are reproduced in the appendices, whilst the Project Area is indicated on the proposals map.

- 6.2.4 Achieving environmental regeneration of the Marston Vale through implementation of the Forest of Marston Vale Plan is a key priority and will need the collaboration of all the interests concerned. The Structure Plan includes a policy designed to achieve the strategy and mechanisms for this. The County Council will consult the Forest Team on all applications that may affect the Community Forest. We also strongly advocate direct consultation by developers with the Forest Team in advance of submitting applications to ensure that appropriate contributions to the creation of the Forest of Marston Vale can be identified at an early stage. Developers may find the Forest of Marston Vale "Guide to Developers, Landowners and Planners" useful.

6.3 Environmental Improvement of the Greensand Trust area

<i>Policy number</i>	<i>Topic</i>
GE 3.	Environmental Improvement of the Greensand Trust area
The County Council will require proposals within the Greensand Trust area, including schemes for restoration and after use, to support the aims and objectives of the Greensand Trust.	

- 6.3.1 The Greensand Trust was originally developed by the Wildlife Trust, English Nature and local authorities in respect to concerns that increasing public pressure could damage the nature conservation interest of some existing sites, and to guide the restoration of the sand pits in the Leighton Buzzard/Heath and Reach area. Since that time it has extended the area it covers along the Greensand Ridge, and part of it is in an AONB.
- 6.3.2 The County Council attaches great importance to the regeneration of the sand extraction areas around Leighton Buzzard and Heath and Reach. In the past mineral extraction often operated under out-dated planning permissions with inadequate restoration conditions. As a result, many quarries had poor restoration plans, blighting the landscape of this area of

Green Belt and not realising the potential to contribute positively to landscape variety and biodiversity. The County Council is of the opinion that the remaining undisturbed land without planning permission should not be released for working unless there is a clear net environmental gain in accordance with the policies of the Plan. Therefore a change in emphasis is now envisaged away from sand extraction and towards restoration and regeneration. This may involve either infilling with inert waste or leaving sites to regenerate naturally, or a mix of the two. It is in this way, by restricting new sites and restoring old ones, that the environmental improvement of this area will occur. Proposals would be expected to enhance the community and environment which they may affect. These benefits may take the form of restoration to nature conservation, woodland, recreation and increased public access, offering benefits to both the local people and the environment in the long term. The circumstances in which these benefits may reasonably be sought are defined in Government guidance, (DoE) Circular 1/97 and MPG 2). The County Council will seek contributions to the work of the Trust through Section 106 Planning Agreements in appropriate cases.

- 6.3.3 MPG 14 'Environment Act 1995: Review of Mineral Planning Permissions' (ROMP) covers the duty by MPAs to undertake reviews of old planning permissions. Reviews are being carried out on such sites in the Leighton Buzzard / Heath and Reach area, and updated conditions agreed.
- 6.3.4 The Leighton Buzzard & Heath and Reach Sand Pit Strategy was adopted by the County Council in year 2000, and may be updated during the lifetime of this Plan. The Strategy aims to identify appropriate and sustainable environmental and recreational after-uses for the extensive sand pits in the area in order to provide a framework within which the County Council can consider restoration proposals. The Leighton Buzzard & Heath and Reach Sand Pit Strategy is considered as a material planning consideration by the County Council when determining restoration and after-use schemes for the area. The boundaries of the strategy are shown on the proposals map.

6.4 Environmental improvement of the Ivel and Ouse Valleys

Policy number	Topic
GE 4.	Environmental improvement of Ivel and Ouse Valleys (The Ivel and Ouse Countryside Project)
The County Council will require proposals in the Ivel and Ouse Valleys, including schemes for restoration and after use, to support, where applicable, the long term aims and objectives of the Ivel and Ouse Countryside Project.	

- 6.4.1 The River Ivel, which flows through the east of Bedfordshire, has been highlighted by the County Council as an Environmental Project Area for countryside action. Proposals for a 'linear country park' on the Ivel Valley were first proposed by the County Council in 1989 and embodied in the County Council's Countryside Strategy, published in 1990.
- 6.4.2 In response to this strategic framework, the Ivel Valley Countryside Project was established in 1992 to work with all sectors of the community to

address the area's recreation, landscape, nature conservation, cultural heritage and environmental awareness needs and issues.

- 6.4.3 In March 2002, the Ivel Valley Countryside Project was incorporated into a new area based countryside management initiative – the 'Ivel and Ouse Countryside Project' – serving the environment and communities of north and east Bedfordshire. Responsibility for the management of the Project lies with a steering group involving a range of public and voluntary sector partners, including Bedfordshire County Council, Mid Beds District Council, Bedford Borough Council, The Wildlife Trust and Environment Agency. The proposals map indicates the Project area and a summary of its strategic aims and objectives is included in the appendices.
- 6.4.4 The County Council is therefore keen to see proposals which contribute towards the overall improvement and enhancement of the Ivel and Ouse Countryside Project area, in accordance with the aims and objectives of the Project and those of the Bedfordshire and Luton Biodiversity Action Plan (2001). The circumstances in which benefits may reasonably be sought are defined in Government guidance, (DoE) Circular 1/97 and MPG 2). The County Council will seek contributions to the work of the Trust through Section 106 Planning Agreements in appropriate cases.

6.5 *Protection of Green Belt land*

<i>Policy number</i>	<i>Topic</i>
GE 5.	Protection of Green Belt land
<p>The MPA / WPA will only grant planning permission for minerals or waste development in the Green Belt, where:</p> <p>a) for all mineral and waste related development, the proposal will be carried out to high environmental and restoration standards (where restoration is appropriate) and would preserve the openness of the Green Belt and minimise conflict with the purposes of its designation, and;</p> <p>b) for waste development, very special circumstances can be demonstrated that justify the proposal.</p>	

- 6.5.1 There is a presumption against inappropriate development which is harmful to the Green Belt. Policy 24 in the adopted Bedfordshire and Luton Structure Plan 2011 lists the types of development that may be permitted in the Green Belt. This includes mineral extraction and restoration where the openness of the Green Belt is preserved and the development does not conflict with the purposes of including land within the Green Belt. Mineral development need not conflict with the purposes of including land in the Green Belt provided that high environmental standards are maintained and the site is well restored. Waste management facilities are not cited as appropriate development within the Green Belt and permission will only be granted under very special circumstances, where for example the waste management proposal contributes to the restoration of a disused quarry or there are overriding community and environmental benefits resulting from the development. The precise boundaries of the Southern Bedfordshire Green Belt have been defined in both the adopted South Bedfordshire Local

Plan and Mid-Bedfordshire Local Plans and are also shown in the proposals map for this Plan. Policy 23 of the Structure Plan sets out the main function of the Green Belt which is to contain the outward growth of Luton, Dunstable, Houghton Regis, Leighton Linlade, Ampthill and Flitwick and to prevent the coalescence of these and other settlements within that area.

- 6.5.2 PPG 2 indicates that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. It sets out in general terms the purpose of including land in Green Belts: to check the unrestricted sprawl of large built-up areas; to prevent neighbouring towns from merging into one another; to assist in safeguarding the countryside from encroachment; to preserve the setting and special character of historic towns and to assist in urban regeneration, by encouraging the recycling of derelict and other urban land. The Guidance states that once defined, the use of land within Green Belts has a positive role to play in providing opportunities for access to open countryside; outdoor sport and recreation; to retain attractive landscapes; to improve damaged and derelict land near towns; to secure nature conservation interest and to retain land for agricultural, forestry and related purposes. An essential characteristic of the Green Belt is its permanence: the protection must be maintained as far as can be seen ahead. Green Belt policies have been in operation since the Southern Bedfordshire Green Belt was originally proposed and adopted by the County Council in 1960.

6.6 Protection of Best and Most Versatile agricultural land

Policy number	Topic
GE 6.	Protection of Best and Most Versatile agricultural land.
<p>Planning permission for development on 'best and most versatile' land, defined as Grades 1, 2, 3a of the Agricultural Land Classification, will only be granted where:</p> <p>a) the applicant can demonstrate that site working, restoration and aftercare will be carried out in a manner which will preserve the long term agricultural quality of the land at the same or higher Agricultural Land Classification Grade as that preceding the development; or,</p> <p>b) it can be shown that no known suitable alternative site of lesser agricultural value is available, and that the loss of 'best and most versatile' agricultural land is reduced as far as practicable and is clearly outweighed by other planning benefits of the proposal.</p>	

- 6.6.1 In a country with such a high proportion of good quality agricultural land – 34% of the agricultural land is classified as Grade 1 or 2 and 42% is Grade 3 (a and b) – the loss of such land to mineral extraction has been a major planning issue. In the past it was national policy to retain agricultural land in full production and to ensure that a minimum was lost to development. This emphasis has now changed. PPG 7 'The Countryside - Environmental Quality and Economic and Social Development' as revised in March 2001 gives updated guidance on development involving agricultural land. At a time of surpluses in agricultural production the need now is to foster

diversification of the rural economy and to balance this against the continuing need to protect the countryside for its own sake without the special priority hitherto afforded to agriculture production. The MPA/WPA will therefore have regard to the balance of environmental impacts and local economic benefits in determination of planning applications on BMV agricultural land, but will only grant permission where any loss of BMV land is clearly justified.

- 6.6.2 Once land is lost to certain development it can be difficult to return it to agriculture. The best and most versatile land (Grades 1, 2, and 3a) is seen as a national resource to be protected from irreversible loss and the current agricultural surpluses are not accepted as an argument against restoring the best and most versatile land to its original quality. PPG 7 states that where there is a choice between sites or different classifications, development should be diverted towards land of the lowest possible classification except where other sustainability considerations suggest otherwise. These might include biodiversity, landscape and amenity value, heritage interest or accessibility to infrastructure, local economic diversity, and the protection of natural resources.
- 6.6.3 Unless exceptional circumstances prevail, minerals and waste development on 'best and most versatile' agricultural land will only be permitted when the applicant can demonstrate that site working, restoration and aftercare will be carried out in a manner which will preserve the long term agricultural potential of the site so that it can be used as 'best and most versatile' agricultural land. In some cases the restoration of high quality agricultural land may conflict with other vital interests. As an example, when restoring the best and most versatile land operators must be able to demonstrate that there is adequate drainage from the site to meet the requirements of the agricultural grade and the landform and to conserve flood plain capacity. In such circumstances proposals will be examined on their merits in the light of the need for the minerals and their status in relation to the Local Plan. On lower quality agricultural land restoration to agriculture may be appropriate, but other beneficial uses, such as amenity, nature conservation and recreation, will be considered.

6.7 Protection of Chilterns AONB

<i>Policy number</i>	<i>Topic</i>
GE 7.	Protection of the Chilterns Area of Outstanding Natural Beauty (AONB)
<p>Permission will only be granted for mineral or waste development in the Chilterns Area of Outstanding Natural Beauty where it is demonstrated to be in the public interest, or where it is minor waste related development that would enhance the vitality of the rural economy and have no detrimental effect on the special character of the AONB.</p> <p>This policy will also apply to proposals for mineral or waste development in areas close to the Chilterns Area of Outstanding Natural Beauty, where such development would result in a detrimental impact on the special character of the AONB.</p>	

- 6.7.1 The chalklands of the Chilterns are described as part of the Nations "finest countryside" in the Countryside Agency's strategy 'Towards Tomorrows Countryside' (Jan 2001). The landscape is characterised by steep sinuous escarpments and rounded chalk hills, beech woodlands, and open chalk downland with commanding views. The area hosts productive farmland, often with ancient hedgerows and a rich, historic cultural landscape boasting small villages with distinctive vernacular arising from use of local materials.
- 6.7.2 The National Parks Commission (now the Countryside Agency) designated the Chiltern Hills as an Area of Outstanding Natural Beauty (AONB) in 1965. The landscape qualities of AONBs are considered by the Government to be equal to those in National Parks, and should be afforded first class standards of management.
- 6.7.3 The primary objective of the designation is the conservation of the natural beauty of the landscape and wildlife. Therefore both policies and development control decisions will favour conservation and enhancement of the landscape in and surrounding the AONB. In all cases, the environmental effects of new proposals will be a major consideration.
- 6.7.4 Government guidance in PPG 7 and MPG 6 (1994) states that applications for new minerals workings, or extensions to existing working in an AONB must be subject to the most rigorous examination. Furthermore, it is stated that all mineral development should be demonstrated to be in the public interest before being allowed to proceed. The same guidance explains the value of AONBs and the duty to conserve it.
- 6.7.5 Further planning permissions for chalk extraction within or close to the Chilterns AONB will not normally be granted. Also, no new cement works will be permitted in the AONB or in locations visibly prominent from it. This presumption seeks to restrain new chalk workings or extensions of existing extraction areas that would take up further areas of the AONB and have adverse effects on the landscape. However, it has been possible to extract chalk to a greater depth without significant adverse environmental impact, and planning permission has been granted to increase the depth of the chalk workings at Kensworth Quarry. This extended the life of the quarry sufficiently to enable significant new investment in plant to be made at cement works in Warwickshire, which are supplied from the Kensworth site.
- 6.7.6 Waste operations have greater locational flexibility than minerals extraction sites, and there should therefore be no need to locate major facilities in the AONB. However, minor waste management operations such as on-farm composting may be acceptable where they contribute directly to the diversification of the local economy, and are undertaken with sensitivity to preserve or enhance the special qualities of the AONB.
- 6.7.7 The Countryside and Rights of Way Act (CROW) enabled the Countryside Agency to progress Conservation Board status for AONBs, which requires a full Management Plan to be adopted. The Management Plan for the Chilterns AONB was launched in the autumn of 2002 and adopted by the County Council. The Shadow Conservation Board will be consulted on all applications for minerals or waste within or close to the AONB boundary. The boundary of the Chilterns AONB is shown on the proposals map.

6.8 Protection of AGLV land

Policy number	Topic
GE 8.	Protection of AGLV
<p>Planning permission will only be granted for mineral or waste operations in Areas of Great Landscape Value (AGLV) where:</p> <p>a) the proposal would preserve or enhance the character, natural beauty, landscape and setting of the area; or,</p> <p>b) any adverse effect on the AGLV is reduced as far as possible and is outweighed by other planning benefits of the proposal.</p> <p>This policy will also apply to proposals close to Areas of Great Landscape Value, where development would result in a detrimental impact on the AGLV.</p>	

6.8.1 The County Council has identified areas of the County as being of Great Landscape Value. The quality of this landscape is often considered equal to that in the national AONB classification. Proposals for extraction and waste disposal within or close to the AGLV will be subject to similar examination to that for AONB. This is in order to balance the need for the proposal with its environmental impact, the scope for mitigating adverse impacts such as those covered in the disturbance policy (GE 18), and for enhancing the landscape with beneficial restoration schemes. There are four areas identified as Areas of Great Landscape Value within Bedfordshire. Each has a distinct character. The AGLV boundaries are described in detail in the Structure Plan (policy 7), and shown on the proposals map for this Plan.

(i) Land in the Upper Ouse Valley

This comprises two principal features; land dominated by the limestone ridge and land in the Upper Ouse with its associated meadow lands. The landscape is characterised by attractive, wooded undulating countryside and a well defined river valley with grassland still a prominent use. Traditional stone-built villages are a particular feature.

(ii) The Greensand Ridge

The Greensand ridge stretches in a band across the County from Heath and Reach in the SW to Sandy in the NE. The Ridge is a prominent feature, broken only by the Ivel Valley, and is visible from some distance across the flat landscape of east and central Bedfordshire. The Ridge's elevation and wooded landscape add to its attractiveness. The Ridge includes two AGLV; these are the main escarpment and the outlying area east of Sandy.

(iii) The Chalk Hills of the Chilterns

Most of this high ground is designated AONB but the AGLV designation also includes the area to the south of Luton including the parkland of the Luton Hoo estate.

- 6.8.2 The Landscape Character Assessment approach recognises that all landscape has value in the local context. Within the wider countryside the MPA / WPA will seek protection of local landscape character and will promote mitigation or restoration designed to enhance the local character. A countywide landscape assessment is in progress as encouraged in PPG 7, which will include character based studies of the AGLV, but will not be fully available until 2004.

6.9 Landscape protection and Landscaping

Policy number	Topic
GE 9.	Landscape protection and Landscaping
<p>Development proposals must be sympathetic to local landscape character. Planning permission for minerals or waste development which is likely to have an adverse effect on the landscape character of the area in which it is proposed will only be granted where any adverse effect is reduced as far as practicable and is outweighed by other planning benefits of the proposal.</p> <p>Where appropriate, development proposals will be required to include a landscaping scheme. Where a landscaping scheme is required, but is not submitted, or is inadequate, inappropriate or likely to prove ineffective, planning permission will be refused.</p>	

- 6.9.1 Landscape can be described as the relationship between people and place. A landscape can be man-made or natural, rural or urban, and may be valued for many interests, including wildlife, social, historic and economic. Development should be sensitive to surrounding landscape features and blend in or complement them as much as possible, regardless of whether a site is specifically designated for its landscape value. Detrimental impacts on the surrounding landscape character will be regarded as a potential reason for refusal of planning permission. Conversely, positive impacts which enhance local landscape character will be regarded as positive benefits in favour of a proposal.
- 6.9.2 Countryside Agency Guidance for England and Scotland identifies Landscape Character Assessment (LCA) is a way of identifying the character, distinctiveness and value of a particular location. It is a method of understanding what a landscape is like today, how it came to be like that, and how it may change in the future. Landscape can be assessed at varying scales and levels of detail, depending on the purpose of the assessment, and key issues may be identified. It can be a powerful tool for developers and planners to aid the planning, design and management of landscapes.
- 6.9.3 A LCA of Bedfordshire (excluding major urban areas) is currently being undertaken by Bedfordshire County Council in partnership with the District

Councils, and should be complete by 2004. Both developers and the MPA / WPA will find it useful to refer to this study and address any issues raised when putting together or considering planning applications.

- 6.9.4 The MPA / WPA will require landscaping schemes for mineral and waste development proposals to take effect during site operations and as part of a restoration / aftercare scheme. This is to mitigate the effects of development on the local landscape, and to maintain, and enhance where possible, the landscape character of an area. High standards of design are required to cover aspects such as the external space around buildings, boundary treatment and lighting as well as planting details. Landscaping during site operations serves the purpose of protecting people and wildlife from visual and other effects of site operations. This would usually be in the form of fencing, hedge or tree planting, or construction of a bund on the site boundary to protect against disturbances such as visual intrusion, illumination and litter. The planting and maintenance of tree and hedge screens to provide quick and effective screening should be undertaken in and around sites prior to development as well as during and after site operations. Screens should be sensitive to their location and should consist of native tree and hedge species or be 'living' fences (a fence covered in a climbing plant) if space is limited.
- 6.9.5 Landscaping proposals may also be an essential part of a planning proposal even where a full detailed restoration scheme is not required. Landscaping requirements may involve applicants entering into a management agreement with the MPA / WPA to provide for the provision, maintenance and management of new planting, and for the retention of existing trees, hedges and woodlands.

6.10 Protection / enhancement of trees and woodland

Policy number	Topic
GE 10.	Protection / enhancement of trees and woodland
Proposals should seek to retain and, where appropriate, increase overall tree and hedgerow cover. The MPA / WPA will only grant planning permission for development that would result in harm to trees and woodland which are of amenity and/or wildlife value where such harm is reduced as far as practicable and is outweighed by other planning benefits of the proposal.	

- 6.10.1 The MPA / WPA recognises the value and importance of trees and woodlands to amenity and the landscape as well as providing wildlife habitats. The conservation of this resource and where possible the extension of tree cover in the county are major policy objectives. At present only 6% of the county is wooded, compared with the UK average of 10%. Therefore it is considered essential to encourage wooded restoration schemes in areas identified as priority areas for woodland creation such as the Forest of Marston Vale, where the target is to achieve 30% woodland cover by 2025. Further priority areas are being identified as part of the Landscape Character Assessment process. It is also essential to preserve and enhance where practicable or appropriate the existing trees and hedgerows in Bedfordshire and Luton, in particular where they contribute to

the landscape quality of the area. The importance of this contribution will be balanced against the other policies of the plan including need for the development. Applicants may find it useful to refer to the "England Forestry Strategy", launched by the Forestry Commission in 2000, which sets out the Government's priorities and programmes for forestry until 2010.

6.11 Protection of sites of national nature conservation importance

Policy number	Topic
GE 11.	Protection of sites of national nature conservation importance
The MPA / WPA will refuse planning permission for minerals or waste proposals that would result in harm to designated or proposed Sites of Special Scientific Interest (SSSI) or National Nature Reserves (NNR), unless the reasons for the development clearly outweigh the nature conservation value of the site and the national policy to safeguard such sites. Where such development is permitted, measures will be required to mitigate or compensate for the effects of the development.	

- 6.11.1 Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR) are sites designated as being of national importance.
- 6.11.2 SSSI form a national network of sites given statutory protection under the provision of the Wildlife and Countryside Act 1981 (as amended). The Countryside and Rights of Way Act 2000 (CROW) gives English Nature the power to designate Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR) based on an assessment of each site. Ramsar, SAC and SPA designated sites are also all SSSI. The SSSI network alone does not contain a sustainable wildlife resource but the sites represent the best examples of biological, geological or landform features which must be protected if the biodiversity of Britain is to be maintained.
- 6.11.3 SSSI account for just 1.2% of the land area of Bedfordshire compared to an average for England as a whole of 6.8%. At present there are over 40 SSSI in Bedfordshire, of which a number are in worked out mineral sites.
- 6.11.4 Consultation with English Nature is required for any proposal which may affect a SSSI. Development outside a SSSI may also adversely affect the special interest within a site, and consultation areas around SSSI are defined by English Nature. These normally extend for 500m although in important or sensitive cases they can extend for up to 2km. Consultations with English Nature may be required beyond these limits where major development is involved. Prior consultation by developers with English Nature is recommended.
- 6.11.5 There will be a strong presumption against development which would either directly or indirectly damage a SSSI. Any proposal for development that

may harm an SSSI will be subject to rigorous examination and allowed only exceptionally. Where there is no acceptable alternative to development affecting a SSSI, measures will be applied to mitigate or compensate for the effects of the development using conditions or planning obligations as necessary.

- 6.11.6 National Nature Reserves (NNR) are areas of national and occasionally international importance for nature conservation which can be owned or leased by English Nature or operated by them under a management agreement. They are also managed by other bodies approved by English Nature. All of the NNR's in the plan area are also designated SSSI and are therefore afforded the above protection. SSSI locations are identified on the proposals map.

6.12 Protection of locally designated sites

Policy number	Topic
GE 12.	Protection of locally designated nature conservation sites, regionally important geological / geomorphological sites (RIGS) and undesignated sites of significant conservation interest.
<p>The MPA / WPA will only grant planning permission for proposals which would adversely affect any:</p> <ul style="list-style-type: none"> a) locally designated nature conservation site, b) regionally important geological / geomorphological site (RIGS), c) other site which is undesignated but nonetheless of significant conservation interest; <p>where any adverse effect is reduced as far as practicable and is outweighed by other planning benefits of the proposal.</p>	

- 6.12.1 In the plan area a number of Country Wildlife Sites (CWS) have been identified based on an Analysis of Habitat Survey conducted by English Nature. In Bedfordshire, CWS represent the top tier of local wildlife sites within the wider countryside. Of over 400 CWS in Bedfordshire, over 50 are located on mineral sites, most of which are considered to have been restored.
- 6.12.2 Local Nature Reserves (LNRs) are designated by local authorities in recognition of their particular value to people and biodiversity and in order to protect habitats of significance.
- 6.12.3 Sites may also be designated on the merits of their geological importance as Regionally Important Geological/Geomorphological Sites (RIGS). There are currently no such designated sites within Bedfordshire or Luton, although any sites identified within the Plan period will be afforded the level of protection that this policy provides.
- 6.12.4 In addition to the above site designations there are many non-designated areas in Bedfordshire and Luton which are of wildlife value. Such areas are important as they may form wildlife corridors, include scarce habitats, or

may be the designated sites of the future. Indeed, such sites form the greater part of the nature conservation resource as a whole, and in general represent the most accessible and available part of nature to most people. Separate policies on landscape, species protection and habitat enhancement protect the landscape and wildlife features of these areas. Application of the Quality of Life Capital approach is a useful means to ensure that any other environmental, social and economic benefits are also retained.

- 6.12.5 The MPA / WPA recognises the role it has to play in conserving and enhancing the countryside of Bedfordshire. It will expect all proposals affecting designated sites to be the subject of a thorough examination, where it will be necessary to show that the effects of the proposed development have been fully considered. Where development is permitted, measures will be applied to mitigate or compensate for the effects of the development, using conditions or planning obligations as necessary.
- 6.12.6 Similarly, proposals that affect non-designated sites of known wildlife value will be looked at in the light of the quality of the nature conservation interest and the balance between this and the need for the development.
- 6.12.7 Reference to the European Birds and Habitats Directives, Bedfordshire Nature Conservation Strategy, the Bedfordshire and Luton Biodiversity Action Plan, Local Environment Agency Plans (LEAPs) and further guidance listed in these documents will help both developers and the MPA / WPA ensure that nature conservation interests are respected.
- 6.12.8 County Wildlife Sites and Local Nature Reserves in Bedfordshire as at 2004 are shown on the proposals map. A list identifying all current CWS in Bedfordshire and detailed information of the interest at each site is available from the County Council.

6.13 Species and Habitat Protection and Enhancement

Policy number	Topic
GE 13.	Species and Habitat Protection and Enhancement
<p>The MPA / WPA will refuse planning permission for proposals that would adversely affect rare or threatened species or their habitats, except where:</p> <p>a) any adverse effect(s) would be overcome by appropriate on or off site mitigation measures; or,</p> <p>b) the adverse effect(s) are reduced as far as practicable and are clearly outweighed by other planning benefits of the proposal and appropriate mitigation and/or compensation measures are taken.</p>	

- 6.13.1 Between 10 and 20 per cent of native species in the UK are under threat, and of the 154 species of plants and animals that have become extinct in the past century, about half were unique to Britain. The Conservation (Natural Habitats etc) Regulations 1994, require that species and habitats of European importance be protected. This is in order to protect and enhance the presence of particular species whether they are on a designated site or

not, and is in accordance with the Habitats Directive (1992). At a national level, the preservation and enhancement of statutorily protected species and their habitats, as defined in the Wildlife and Countryside Act 1981 (as amended) or the Badgers Act 1992, is a material consideration of any minerals or waste development proposal. In addition, the UK Biodiversity Action Plan (UK BAP) (1994) aims to conserve and enhance biodiversity in the UK and to contribute to global biodiversity. The Bedfordshire and Luton BAP is a more detailed strategy to meet this aim and lists locally protected species. The enhancement and expansion of any natural habitat will in turn help to increase biodiversity.

- 6.13.2 Developers should seize all opportunities to preserve, enhance and create species, features, habitats and landscape types in Bedfordshire and Luton even where nature conservation is not the primary end use of a site. Mineral and waste development has the potential to harm habitats that support protected species either directly through taking the land itself, or indirectly through noise, dust and other disturbances. Equally the effects of development may be minimised by conditions requiring, for example, operational restrictions or fencing, or there may be opportunities to enhance habitats through mitigation, off-site compensation or sensitive restoration. Development which would harm rare species or their habitats but which is justified on the basis of other planning benefits will only be permitted where measures are taken to reduce disturbance to a minimum, to maintain and enhance the survival of the species or habitat feature on site, or to provide an alternative suitable habitat and relocate the species.
- 6.13.3 Certain species may not be designated as endangered or threatened, but still contribute to our landscape and should be taken into account in applications for development, potentially through use of the Quality of Life Capital approach, and protected nonetheless. This may be through the restoration of old mineral workings to a particular type of habitat, the creation of wildlife corridors between a restored site and a similar area, or replacing a habitat lost through mineral extraction with one that is rare or of a higher quality.
- 6.13.4 English Nature will be consulted on proposals that may affect protected species, and developers are advised to consult them at the pre-application stage for advice on protected species and licensing arrangements. The Department of the Environment, Food and Rural Affairs (DEFRA) is the licensing authority regarding the protection of European Protected species. Rare and threatened species in the Plan area are listed in the 'Red Data Book' which is regularly updated by a partnership consisting of Bedfordshire County Council, The Wildlife Trust and the Bedfordshire Natural History Society.

6.14 Archaeology

Policy number	Topic
GE 14.	Archaeology
<p>When considering proposals for minerals and waste development the MPA / WPA will require, where appropriate, the preservation of sites of major archaeological importance and their settings through: -</p> <ul style="list-style-type: none"> a) Ensuring the availability of sufficient information from developers to evaluate the importance of sites and assess the impact of development proposals, and refusing applications where required information is not provided; b) Refusing or modifying development proposals likely to have an unacceptable adverse effect upon sites and their settings; c) Ensuring that provision is made for an appropriate level of investigation and recording in advance of the destruction of those sites which do not merit permanent preservation, and refusing applications where such provision is not made; d) Requiring a long-term management plan from developers where appropriate, for sites of archaeological importance which are preserved in-situ, and refusing applications where such a plan is not agreed. 	

- 6.14.1 Archaeological remains are irreplaceable. These remains should be seen as a finite non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction. Where nationally important archaeological remains and their settings are affected by proposed development, there will be a presumption in favour of their physical preservation. The desirability of preserving important archaeological remains and their settings is a material consideration in determining planning applications, whether those remains are scheduled or unscheduled. Further guidance on the handling of archaeological remains is given in Planning Policy Guidance Note 16 (PPG 16).
- 6.14.2 Only a small proportion of known archaeological sites are statutorily protected as Scheduled Ancient Monuments. Other archaeological remains, known and as yet undiscovered, exist throughout the County as buried sites, earthworks and standing buildings. They form part of the County's history and heritage and are of educational, academic and tourism value. The MPA / WPA will seek the preservation of important sites or their full investigation prior to disturbance, and the use of management agreements to mitigate the potentially adverse effects of established and other land uses.
- 6.14.3 In cases where the need for the mineral is judged to outweigh the value of preserving important archaeological remains, one option is an excavation to investigate and record the evidence in accordance with guidance set out in PPG 16. In such cases, provision for resourcing all stages of the investigation and the reporting of its results needs to be made by the developer.

- 6.14.4 The CBI has published a revised Code of Practice for Mineral Operators (1991) on archaeological investigations. It provides advice for minerals developers, recommending early consultations regarding archaeological interests when preparing planning applications. Waste management developers may also find this guidance useful.

6.15 Historic Buildings and the Historic Environment

<i>Policy number</i>	<i>Topic</i>
GE 15.	Statutorily designated Historic Buildings and Sites
<p>The MPA / WPA will refuse planning permission for mineral or waste development proposals which would have an adverse impact on:</p> <ul style="list-style-type: none"> a) listed buildings and/or their setting; b) ancient monuments and/or their setting; c) registered historic parks and gardens and/or their setting; d) registered battlefields and/or their setting; <p>unless an over-riding need can be demonstrated which outweighs the projected impact on the historic building or area.</p>	

<i>Policy number</i>	<i>Topic</i>
GE 16.	Local Historic Buildings, Conservation Areas and Historic Environment sites
<p>The MPA / WPA will only grant planning permission for minerals and waste development which would have an adverse impact on:</p> <ul style="list-style-type: none"> a) sites and buildings of local historic interest and/or their setting; b) conservation areas and/or their setting; <p>where any adverse impact is reduced as far as practicable and is outweighed by other planning benefits of the proposal.</p>	

- 6.15.1 Bedfordshire and Luton possess a number of structures, buildings and areas of architectural and historical interest, which make up our historic environment. Entire towns or villages may warrant special protection because of their historical significance. Ampthill, for example, has the greatest number of listed buildings in Bedfordshire and the historic context of this area will be considered in its entirety when considering minerals and waste proposals.
- 6.15.2 Sites of historic interest form an irreplaceable and vital part of our heritage and should be granted the highest protection from minerals and waste development. There are structures and areas of local historic interest that although not designated, should still be considered historically significant and taken into account in minerals and waste applications. Mineral extraction sites and redundant brickworks are part of Bedfordshire's

industrial heritage. Restoration proposals should incorporate public access and an explanation of the site's history where appropriate.

- 6.15.3 The MPA / WPA will refuse proposals which are likely to have a significant adverse affect on any of the structures or areas listed in the above policy, unless an over-riding need for the proposal can be demonstrated which outweighs the projected impact on the historic building or area. The extent of any further investigation required, the importance of each structure or area of historic interest, and the need to preserve remains in-situ, ex-situ or at all, is assessed on a site by site basis by the County Archaeologist. Areas that provide the setting for a listed structure, area or building will be afforded equal protection.

6.16 *Pollution control*

<i>Policy number</i>	<i>Topic</i>
GE 17.	Pollution control
<p>The MPA / WPA will not grant permission for mineral and waste development proposals which are likely to carry a significant risk of:-</p> <p>a) contaminating land, or;</p> <p>b) discharging pollution into the atmosphere, or;</p> <p>c) polluting water courses or groundwater;</p> <p>at levels which exceed statutory pollution and emission controls.</p>	

- 6.16.1 There is a growing awareness and concern over pollution issues at both the local and global level. The resolution of these issues will require concerted action by Government, public and statutory bodies, industry and individuals. Serious cases of pollution could occur if the fuels, reagents and chemicals used by the minerals industry or handled at waste sites were not strictly controlled.
- 6.16.2 The emission of dust, smoke, fumes, gases and noise by the operations of both minerals and waste management industries generally constitutes a potential nuisance rather than a health hazard. Planning conditions will be imposed to mitigate and limit adverse effects from mineral and waste operations from a planning perspective. For example, where the statutory powers of control of dust, smoke and fumes outlined in paragraph 87 of MPG 2 do not apply, or could not be applied effectively, it may be desirable to impose planning conditions requiring the adoption of recognised methods of suppression and control of dust.
- 6.16.3 Stringent controls are imposed on most waste sites by licence legislation and associated enforcement, and the site operator will generally be liable for costs arising from a pollution incident at that site. There are a number of agencies who have responsibilities for certain aspects of pollution and these include the Health and Safety Executive, Environment Agency and District Council Environmental Health Departments. It is not intended to use planning powers to control detailed aspects of operations covered by other regulatory organisations, but the overall pollution potential of a proposed

development and its acceptability at a given location remains a material planning consideration.

6.17 Disturbance

<i>Policy number</i>	<i>Topic</i>
GE 18.	Disturbance
<p>The MPA / WPA will only grant planning permission for mineral and waste development proposals which are likely to generate disturbance from noise, vibration, dust, mud on the highway, fumes, gases, odour, illumination, litter, birds or pests, where the impact of any anticipated disturbance is reduced as far as practicable and is outweighed by other planning benefits of the proposal.</p>	

- 6.17.1 The MPA / WPA recognises that mineral and waste operations can be intrusive activities and do from time to time cause disturbance to people. For example, sand and gravel when worked dry can, if untreated, give rise to significant levels of dust in the vicinity of the site. Similarly, landfill sites dealing in the disposal of domestic refuse are prone to vermin and birds which scavenge on the waste deposited. The planning system allows for such concerns to be addressed through the imposition of conditions on planning permissions which seek to mitigate the worst effects of mineral and waste operations. The degree of disturbance which may be caused by a proposal will dictate the strength of objection by the MPA / WPA. As previously outlined, there are a number of other agencies that have responsibilities covering similar concerns. For example, the Environment Agency is responsible for minimising pollution including noise and vibration through Integrated Pollution Prevention and Control (IPPC) and the Health and Safety Executive have responsibilities that include health and safety at work and the control of hazardous substances regulations. The District Councils Environmental Health Departments also investigate concerns from members of the public.
- 6.17.2 As PPG 23 and PPG 10 explain, planning and pollution control systems are separate but complementary. Both have different objectives. PPG 23 adds that material considerations may include the possibility that nuisance might be caused by the release of smoke, fumes, gases, dust, steam, smell or noise, where not controlled under Part 1 of the EPA 1990 or, in the case of waste facilities by birds, vermin or overblown litter.

6.18 Flooding

<i>Policy number</i>	<i>Topic</i>
GE 19.	Flooding
Permission will not be granted for minerals and waste development proposals in flood plains or flood risk areas where such proposals would significantly reduce the capacity of the flood plain, or impede the flow of flood water thereby increasing the risk of flooding elsewhere.	

- 6.18.1 The Environment Agency (EA) and, where appropriate, the Internal Drainage Boards (IDBs) are consulted on all proposals likely to affect areas of flood risk. These areas are defined by the EA in their Indicative Floodplain Maps, which can be viewed at www.environment-agency.gov.uk. The MPA / WPA will adopt a precautionary approach to development in areas of flood risk. An assessment of risk using the sequential test outlined in PPG25 will be required in order to demonstrate that the site is suitable from a flood-risk perspective for the proposed use. In applying this test the Council will liaise with the Environment Agency.
- 6.18.2 Development associated with mineral extraction, waste disposal and restoration can exacerbate the risk of flooding through the creation of impermeable surfacing. Landfilling in particular can hinder flood alleviation works and the infilling of wet pits can reduce their flood attenuation capacity. Voids created by mineral extraction can provide additional storage for flood water in certain cases. They can be used as a measure to reduce flood risk whilst encompassing conservation and amenity benefits. The potential impacts of ancillary structures, including mineral stockpiles should be considered to ensure that they do not impede flood flows or reduce flood storage capacity. Flood protection measures agreed with the MPA / WPA in consultation with the EA and the IDBs, and funded by the developer, may enable proposals to go ahead within areas vulnerable to flooding. Any impact of flood protection works on conservation and recreation interests will be a material consideration in determining the proposal.

6.19 Water resources

<i>Policy number</i>	<i>Topic</i>
GE 20.	Water resources
Permission will not be granted for minerals and waste development proposals where the proposals would have an unacceptable impact on the quality or quantity of groundwater and/or surface water drainage, and the flow of groundwater on or in the vicinity of the site.	

- 6.19.1 The implications of removing minerals and/or depositing waste above and below the water table should be assessed at an early stage. Such proposals may affect underground storage capacity, water purifying

potential, flow characteristics and abstraction potential in both the immediate and surrounding areas. Proposals should consider whether dewatering may affect local groundwater levels. Fish stocks in nearby still waters must be protected from the impact of drawdown. Site dewatering may involve pumping into a river fishery. Proposals should consider the water quality and rate of the discharge, especially that which contains suspended solids. Fish spawning, feeding and survival must be protected.

- 6.19.2 The MPA / WPA will work with the Environment Agency (EA) to ensure minerals and waste applications do not adversely affect groundwater. In line with EA policy, the MPA / WPA will normally reject proposals requiring a Waste Management Licence or PPC Permit in a Zone 1 area. The EA's draft position on "The Location and Impact of Landfill Sites" is contained in Annex A of the Draft Landfill Directive Regulatory Guidance Note 3. In all cases minerals and waste activities must be operated carefully and closed and restored in such manner as to ensure no long term pollution problems.
- 6.19.3 Groundwater Vulnerability Maps produced by the Geological Survey and Groundwater Protection Zone (GPZ) maps produced by the EA are available to advise developers whether a particular site will be of risk to groundwater resources. Further information and advice on the EA's policy and the mapping can be found in the EA document "Policy and Practice for the Protection of Groundwater" (1998) and the GPZ maps, all of which can be viewed on the EA website (www.environment-agency.gov.uk).

6.20 Public Rights of Way

<i>Policy number</i>	<i>Topic</i>
GE 21.	Public Rights of Way
<p>Planning permission for minerals or waste development proposals that would lead to disruption of the public rights of way network in either the short or long term will only be granted where:</p> <p>a) suitable alternative arrangements are made to maintain or enhance public access opportunities; or,</p> <p>b) where no suitable alternative arrangements can be made, disruption to the rights of way network is reduced as far as practicable and is clearly outweighed by other planning benefits of the proposal.</p> <p>Where permission is granted for a non-permanent land use that will affect public rights of way, provision must be made within the restoration scheme for an appropriate network to be reinstated. Where appropriate, restoration proposals will be required to enhance and/or extend opportunities for public access.</p>	

- 6.20.1 The Public Rights of Way (PROW) network comprises footpaths, bridleways and byways and provides an important means of accessing the countryside in general as well as for use as a transport corridor. They are also an important part of our heritage.

- 6.20.2 Mineral extraction and waste development can directly affect PROW in both the short and long term. Where this occurs, operators will be required to provide satisfactory alternative routes and ensure that PROW on their land remain usable at all times. This may require additional screening, landscaping, signs, gates or stiles. Crossing points across PROW should ensure the safety of users at all times.
- 6.20.3 Although it is not normally possible to prepare a stopping up or diversion order until permission for the development has been granted, any diversion or stopping up of an existing PROW must, before being implemented, have been considered under appropriate rights of way legislation. Restoration schemes must provide for access which is at least as good as that existing before workings began and should be seen as an opportunity to create new PROW when possible and desirable.

6.21 Transport: alternative means

Policy number	Topic
GE 22.	Transport: alternative means
The MPA / WPA will require, wherever practicable and appropriate, the use of rail, conveyors, pipelines, canals and rivers in preference to the use of roads for the bulk transportation of materials. Proposals must demonstrate that alternative transport methods to road have been considered.	

- 6.21.1 The MPA / WPA is keen to limit the reliance on road transport as a method of transporting mineral and waste materials within Bedfordshire. This principle is in line with Government guidance, including PPG 13 'Transport'. The construction of costly sustainable transport links, such as rail, may only be viable where a long-term use for the site has been identified. It is also recognised that sustainable transport methods are generally only economically viable for long distances, and that road transportation will continue to be relied on for local waste collection and transportation.
- 6.21.2 The use of rail to transport minerals and waste, and the inclusion of infrastructure such as railheads at an early stage is encouraged by the MPA / WPA. The MPA / WPA will also seek to protect current and future facilities (e.g. railheads).

6.22 Transport: suitability of local road network

Policy number	Topic
GE 23.	Transport: suitability of local road network
Where access to a proposed development site can only be achieved by road the MPA / WPA will only grant planning permission for mineral and waste development where the material is capable of being transported to and from sites via the strategic highway network. The suitability and capacity of available access routes will be taken into account and proposals which use significant lengths of unsuitable roads to gain access to the strategic highway network will not be permitted, unless suitable improvements can be agreed with the developer.	

6.22.1 The main problems associated with road transportation are noise, vibration, mud, dust, spillage of cargo, fumes, damage to buildings and roads, visual intrusion and a reduction in road safety. These problems can be limited by the following measures:

- installation of wheel cleaning facilities
- sheeting of lorries
- private haul roads
- consideration of working hours
- road safety improvements and traffic orders
- highway improvements

6.22.2 Site access roads/entrances are places where these problems may be particularly bad. The MPA / WPA will consult the relevant Highway authorities to ensure that the most suitable point of access is used where a choice exists, and that any negative effects are minimised. Planning permission will not be granted where access to a site is unacceptable.

6.22.3 The MPA / WPA recognises that it is often not practicable, for a variety of reasons, to transport material other than by road. In these circumstances, the MPA / WPA will expect operators to avoid using roads other than those on the strategic highway network. Proposals involving use of significant lengths of non-strategic roads, particularly through settlements, will not generally be supported.

6.22.4 The Strategic Highway Network for Bedfordshire and Luton is shown on the proposals map.

6.23 Ancillary minerals and waste developments

<i>Policy number</i>	<i>Topic</i>
GE 24.	Ancillary minerals and waste developments
Where planning permission is granted for development required in connection with mineral extraction or waste management, it will be limited to the duration of the main workings and appropriate restoration of the site will be required.	

6.23.1 The operation of a mineral facility or waste management site may require the construction or erection of associated temporary and permanent buildings, plant and equipment. This may be for the following purposes:

- storage of minerals or waste, plant, equipment or fuel;
- reception centre/area for household waste delivered by the public;
- minerals or waste processing/treatment equipment;
- buildings and areas required for the administration or servicing of a minerals or waste facility;
- construction of a haul road.

6.23.2 Permission will normally be granted for such operations where the applicant can demonstrate the benefit of the development. When the ancillary development is no longer required or temporary planning permission expires, the site must be restored to its former use or to an improved scheme as agreed by the MPA / WPA. Environmental control facilities required in connection with landfill sites, such as boreholes for landfill gas and groundwater monitoring and landfill gas energy utilisation plant, will be required beyond the period of landfill operations.

6.24 Buffer zones

<i>Policy number</i>	<i>Topic</i>
GE 25.	Buffer zones
Proposals for minerals or waste development will not be permitted unless they can demonstrate that an adequate buffer zone exists between the proposed development and neighbouring existing or proposed sensitive land uses.	
The MPA / WPA will resist proposals for land uses or other activities within the buffer zone that:	
a) could be adversely affected by the effects of mineral extraction or waste management operations, and / or;	
b) could prejudice the ability of the mineral extraction or waste management operator to work the permission.	

- 6.24.1 Buffer zones seek to protect adjacent land uses from mineral extraction and waste management, by providing a tract of land within which no operations should take place. As well as defining buffer zones as a stand-off for existing land uses, the MPA / WPA wishes to ensure that no new incompatible development encroaches upon existing permitted mineral and waste management sites and those sites identified as preferred areas in this Plan, in order to avoid unnecessary sterilisation of known resources.
- 6.24.2 Commonly buffer zones are planted with trees to provide a visual break, or landscaped bunds are constructed to alleviate noise and improve the view of the site from the surrounding area.
- 6.24.3 It is not appropriate to impose a precise distance for buffer zones since each site is different and will need to be looked at in the light of the particular site circumstances. For instance, residential properties located close to a proposed mineral site may not, by virtue of intervening topography, require as great a buffer zone as properties located the same distance away from the boundary of a potential site with no intervening visual or noise barrier. Also, where development is of a nature that would not disturb local residents, such as being small scale or enclosed in buildings, a reduced buffer zone may be acceptable. Where an existing barrier does not exist it is sometimes possible for developers to mitigate any potential disturbance either at source or by the erection of additional barriers. These may be in the form of earth mounds, tree planting or fencing depending on the disturbance to be mitigated. Where it is proposed to plant trees/shrubs this should be implemented well in advance of the commencement of extraction or waste management activity.
- 6.24.4 Similarly, when considering waste management proposals, the appropriate distance would vary depending upon the type of waste to be managed. Hazardous and non-hazardous waste management sites would require a greater buffer zone than inert waste because of the potential impacts of these forms of development.
- 6.24.5 Offensive odours may travel for some distance, especially in the prevailing wind direction. Other climatic and topographical conditions may also combine to concentrate these odours at particular locations some distance from a waste site. Therefore, for operations which may give rise to such problems the buffer zone distances should be substantially increased.
- 6.24.6 Although the policy does not include specific distances, the following give an indication of the distances that would generally be considered as appropriate to different types of development. Buffer zones would normally be expected to be set at around 200 metres for mineral working and inert waste disposal, and around 250 metres for waste management facilities. Where the proposal generates legitimate health concerns the MPA/WPA may require a risk assessment to be undertaken as part of the planning process.

6.25 Restoration

<i>Policy number</i>	<i>Topic</i>
GE 26.	Restoration
<p>The MPA / WPA will require all proposals for non-permanent minerals or waste development to include the high quality restoration of the site within a reasonable timescale. Normally this will be for agriculture, forestry, nature conservation and/or amenity/recreation. Opportunities for habitat creation should also be considered and, where practical and desirable, provided in all restoration proposals. The MPA / WPA will support other uses which accord with the policies of the development plan.</p>	

- 6.25.1 The MPA / WPA is fully committed to achieving higher standards of restoration and changing public attitudes are also demanding these improving standards. Industry recognises the need for high quality restoration and safe and responsible management of minerals and waste management sites. Standards of restoration have generally improved in recent years although there remains scope for further improvement. Government guidance on this is available in Annex 5 of MPG 7.
- 6.25.2 Opportunities for habitat creation in line with the Local Biodiversity Action Plan for Bedfordshire and Luton and to bring employment and visitors into Bedfordshire and Luton will be favourably considered where suitable. It will often be possible to incorporate some degree of habitat creation even where this is not the primary objective of the restoration proposal, and the WPA / MPA will expect developers to do so wherever practical. The role of mineral voids for flood mitigation purposes will be considered favourably if the EA/IDB identify the benefit of such measures on a particular site.
- 6.25.3 Additional control over restoration and the extent of dereliction which can result from mineral extraction and waste management operations may be achieved by the MPA / WPA entering into a legal agreement with applicants. Wherever possible the MPA / WPA will ensure that these matters are adequately covered by conditions of planning consents and that these conditions are adhered to. Where planning conditions alone are insufficient, Section 106 of the 1990 Town and Country Planning Act (as amended by the Planning and Compensation Act 1991) enables the use of planning obligations or unilateral undertakings (where no agreement can be reached) to ensure the implementation of additional works, or for the developer to agree to refrain from certain operations. It may also be appropriate in exceptional circumstances listed in paragraphs 94 and 95 of MPG 7 for the developer to agree with the MPA / WPA to provide a restoration or performance bond, which guarantees the availability of a sum of money to cover the cost of restoration works in the event of a breach in the terms of the planning consent, planning obligation or unilateral undertaking. It is not intended that there should be any overlap or conflict with any financial provision required under the Environmental Protection Act 1990.

6.26 Aftercare

Policy number	Topic
GE 27.	Aftercare
A scheme of aftercare, normally for a period of five years following restoration, will be required for minerals and waste sites which are to be restored for agriculture, forestry or amenity use.	

- 6.26.1 One way of minimising development impact is to ensure that land taken for mineral and waste uses is restored at the earliest opportunity and that it is left in a safe state capable of sustaining an acceptable after-use. 'Amenity' is the general term for being able to enjoy the countryside, for example through recreation (e.g. angling, walking, water sports etc) and nature conservation.
- 6.26.2 On larger sites restoration will be required to be progressive in nature and to take place within a reasonable timescale, so that only a portion of the whole site is disturbed by mineral extraction or waste disposal operations at any one time. Operations will be required to follow a rolling programme of restoration, and complete their restoration in sequence. Where sites are large and cannot be restored in the short term, interim schemes for restoration and improvement of the site will be required.
- 6.26.3 Applicants will normally be required to submit an aftercare scheme for a period of five years following restoration to ensure that the restoration scheme is maintained until it becomes naturally self-sustaining. In certain cases it may be appropriate to agree a shorter or longer period, depending on the nature of the restoration scheme.
- 6.26.4 As outlined in paragraph 6.25.3, the WPA/MPA may require additional securities to ensure effective restoration. These provisions will also apply as appropriate in securing aftercare schemes.

6.27 Monitoring and Review

- 6.27.1 The implementation of the Local Plan will be carried out principally through the normal development control process. The MPA / WPA will have regard to the policies when considering applications for mineral extraction and waste management facilities and the conditions attached to any permission.
- 6.27.2 The MPA / WPA will continue to monitor development proposals and Local Plans within and outside the County which would affect the implementation of the policies and proposals contained in this Local Plan, particularly the sterilisation of known mineral resources.
- 6.27.3 The Local Plan will be implemented by the MPA / WPA in exercise of their statutory responsibility in determining planning applications in accordance with its policies and the provisions of this Plan.
- 6.27.4 The success of Local Plan depends upon the co-operation of all parties and will be measured by:

- the steady release of reserves to meet regional and national guidance;
- compliance with both National and our own Waste Strategy targets;
- the development of preferred sites;
- adherence to the criteria and constraints listed;
- the effectiveness of the criteria in the development control process;
- compliance with the proximity principle and sustainable transport objectives;
- minimisation of disturbance caused by mineral and waste developments;
- protection and enhancement of our historic and ecologically important landscape, designated areas and agricultural land;
- Protection and enhancement of protected and endangered species, their habitats and biodiversity;
- Successful land restoration that returns sites to beneficial afteruse.

6.27.5 To ensure flexibility of the Local Plan, continual monitoring of all relevant factors will take place and account will be taken of matters such as changes in national, regional and County policies; need; landbanks; production levels; planning decisions and any other relevant information.

6.27.6 The MPA / WPA will keep under review the likely future demand for minerals and waste facilities in the County and the extent of known resources and capacities. The policies and proposals set out in the Minerals and Waste Local Plan will be reviewed at least once every five years.

7 PROPOSALS MAP

7.1.1 The areas covered by specific policies of the Plan are shown on the Proposals Map, which is presented in a set of four sheets for ease of reading. The four sheets are:

- Map 1:
 - Forest of Marston Vale
 - Greensand Trust Area
 - Leighton Buzzard & Heath and Reach Sandpit Strategy Area
 - Ivel and Ouse Countryside Project Area
 - Chilterns Area of Outstanding Natural Beauty
- Map 2:
 - Areas of Great Landscape Value
 - County Wildlife Sites
 - Local Nature Reserves
- Map 3:
 - Green Belt
 - Minerals Consultation Areas
 - Sites of Special Scientific Interest
- Map 4:
 - Strategic Highways Network

Maps 1 - 4 are located inside the rear cover of this Plan.

8 APPENDICES

Appendix 1: List of Main Current Guidance and Legislation

Acts of Parliament

Planning and Compulsory Purchase Act 2004

Countryside and Rights of Way Act 2000

Environment Act 1995

Planning and Compensation Act 1991

Environmental Protection Act 1990

Town and Country Planning Act 1990

Highways Act 1980

Statutory Instruments

SI 1999 No. 3280	Town and Country Planning (Development Plan) (England) Regulations 1999
SI 1999 No. 1892	Town and Country Planning (Trees) Regulations 1999
SI 1999 No. 293	Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999
SI 1999 No. 193	Town and Country Planning (Fees for Applications and Deemed Applications) Regulations 1989
SI 1995 No. 419	Town and Country Planning (General Development Procedure) Order 1995
SI 1995 No. 418	Town and Country Planning (General Permitted Development) Order 1995
SI 1994 No. 2716	Conservation (Natural Habitats, etc) Regulations 1994
SI 1992 No. 1492	Town and Country Planning General Regulations 1992
SI 1992 No. 656	Planning (Hazardous Substances) Regulations 1992
SI 1991 No. 2804	Town and Country Planning (Enforcement Notices and Appeals) Regulations 1991
SI 1990 No. 1519	Planning (Listed Buildings and Conservation Areas) Regulations 1990
SI 1988 No. 1812	Town and Country Planning (Applications) Regulations 1988
SI 1987 No. 764	Town and Country Planning (Use Classes) Order 1987

Planning Policy Guidance Notes (PPG's) and Planning Policy Statements (PPS's)

PPG1	General Policy and Principles
PPG2	Green Belts
PPG3	Housing
PPG4	Industrial and Commercial Development and Small Firms
PPG5	Simplified Planning Zones
PPG6	Town Centres and Retail Development
PPG7	The Countryside: Environmental Quality and Economic and social development
PPG8	Telecommunications
PPG9	Nature Conservation
PPG10	Planning and Waste Management
PPG11	Regional Planning
PPG12	Development Plans
PPG13	Transport
PPG14	Development on Unstable Land
PPG15	Planning and the Historic Environment
PPG16	Archaeology and Planning
PPG17	Planning for Open Space, Sport and Recreation
PPG18	Enforcing Planning Control
PPG19	Outdoor Advertisement Control
PPG20	Coastal Planning
PPG21	Tourism
PPG22	Renewable Energy
PPG23	Planning and Pollution Control
PPG24	Planning and Noise
PPG25	Development and flood risk
PPS1	Delivering Sustainable Development
PPS6	Planning for Town Centres
PPS7	Sustainable Development in Rural Areas
PPS11	Regional Spatial Strategies
PPS12	Local Development Frameworks
PPS22	Renewable Energy (Including Companion Guide)
PPS23	Planning and Pollution Control

Minerals Policy Guidance Notes (MPG's) and Mineral Policy Statements (MPS's)

MPG1	General considerations and the development Plan System
MPG2	Applications, Permissions and Conditions
MPG3	Coal Mining and Colliery Spoil Disposal
MPG4	Revocation, Modification, Discontinuation, Prohibition and Suspension Orders Town and Country Planning (Compensation for Restriction on Mineral Working and Mineral Waste Depositing) Regulations 1997
MPG5	Stability in Surface Mineral Workings and Tips
MPG6	Guidelines for Aggregates Provision in England
MPG7	The Reclamation of Mineral Workings
MPG8	Planning and Compensation Act 1991: Interim Development Order Permission (IDOs) - Statutory Provisions and Procedures
MPG9	Planning and Compensation Act 1991: Interim Development Order Permission (IDOs) - Conditions
MPG10	Provision of Raw Material for the Cement Industry.
MPG11	Control of Noise at Surface Mineral Workings
MPG13	Guidelines for Peat Provision in England, including the place of Alternative Materials
MPG14	Environment Act 1995: Review of Mineral Planning Permissions
MPG15	Provision of Silica Sand in England
MPS2	Controlling and Mitigating the environmental effects of mineral extraction in England

Note

Planning Policy Guidance Notes and Mineral Planning Guidance Notes are being replaced by Planning Policy Statements and Mineral Policy Statements, under the Planning and Compulsory Purchase Act 2004. The ones listed in the tables above are current at the time of this document going to print.

Selected Circulars (inc. ex DETR and DOE circulars)

01/01	Arrangements for handling heritage applications - Notification and Directions by the Secretary of State (Culture, Media and Sport Circular 01/2001)
04/01	Countryside and Rights of Way Act 2000
05/00	Planning Appeals: Procedures (Including Inquiries into Called-In Planning Applications)
04/00	Planning controls for hazardous substances
07/99	The Town and Country Planning (Development Plans and Consultation) (Departures) Directions 1999
02/99	Environmental Impact Assessment
10/97	Enforcing Planning Control: Legislative Provisions and Procedural Requirements
01/97	Planning Obligations
15/96	Planning Appeal Procedures
11/95	The use of Conditions in Planning Permissions
11/94	Environmental Protection Act 1990: Part II, Waste Management Licensing, The Framework Directive on Waste
02/93	Public Rights of Way
31/92	The Town and Country Planning (Fees for Applications and Deemed Applications)(Amendment) (No. 2) Regulations 1992
19/92	The Town and Country Planning (Development Plans and Consultation) Directions 1992
15/92	Publicity for Planning Applications
14/91	Planning and Compensation Act 1991
14/90	Electricity Generating Stations and Overhead Lines
17/89	Landfill Sites: Development Control
01/88	Planning Policy Guidance and Minerals Planning Guidance
20/87	Use of Waste Material for Road Fill
22/80	Development Control - Policy and Practice
58/78	Report on the Committee on Planning Control over Mineral Working
36/78	Trees and Forestry

Appendix 2: List of Acronyms and Abbreviations

AD	Anaerobic Digestion
AGLV	Area of Great Landscape Value
AONB	Area of Outstanding Natural Beauty
BAA	British Aggregates Association
BAP	Biodiversity Action Plan
BPEO	Best Practicable Environmental Option
C + I	Commercial and Industrial (waste)
CBI	Confederation of British Industry
CHP	Combined Heat and Power
CIRIA	Construction Industry Research and Information Association
CROW	Countryside and Rights of Way Act (2000)
CWS	County Wildlife Site
DEFRA	Department of Environment, Food and Rural Affairs
DETR	(former) Department of Environment, Transport and Regions
DTLR	(former) Department of Transport, Local Government and Regions
DoE	(former) Department of Environment
EA	Environment Agency
EELGC	East England Local Government Conference
EERAWP	East England Regional Aggregates Working Party
EERWMS	East of England Regional Waste Management Strategy
EfW	Energy from Waste
EIA	Environmental Impact Assessment
EPA	Environmental Protection Act (1990)
FSS	First Secretary of State
GPZ	Groundwater Protection Zone
HWRC	Household Waste Recycling Centre
IDB	Internal Drainage Board
IDO	Interim Development Order
IPPC	Integrated Pollution Prevention and Control
LCA	Landscape Character Assessment
LDF	Local Development Framework
LEAP	Local Environmental Action Plan (Environment Agency document)
LNR	Local Nature Reserve
LPA	Local Planning Authority

mcm	Million cubic metres
MKSMSRS	Milton Keynes and South Midlands Sub Regional Strategy
MPA	Minerals Planning Authority
MPG	Minerals Policy Guidance Note
MRF	Materials Recovery Facility
MSW	Municipal Solid Waste
mt	Million tonnes
MWMS	Municipal Waste Management Strategy
MWLP	Minerals and Waste Local Plan
NNR	National Nature Reserve
ODPM	Office of the Deputy Prime Minister
pcm	Per cubic metre
PPC	Pollution Prevention and Control
PPG	Planning Policy Guidance Note
PROW	Public Rights of Way
QPA	Quarry Products Association
RAWP	Regional Aggregates Working Party
RDF	Refuse Derived Fuel
RIGS	Regionally Important Geological / Geomorphological Site
ROMP	Review of Old Minerals Permissions
RPG	Regional Planning Guidance
RSS	Regional Spatial Strategy
RTAB	Regional Technical Advisory Body (Waste planning)
SAC	Special Area of Conservation
SERPLAN	South East Regional Planning Conference
SERP 160	SERPLAN waste strategy for South East England (document code)
SERAWP	South East Regional Aggregates Working Party
SPA	Special Protection Area
SSA	Strategic Sustainability Appraisal
SSSI	Site of Special Scientific Interest
SWMA	Strategic Waste Management Assessment (EA document)
WPA	Waste Planning Authority
WTS	Waste Transfer Station

Appendix 3: Glossary

A

Aftercare	The maintenance work needed to ensure that a restoration scheme for a minerals/waste site is successfully implemented. Such maintenance work may include, for example, the replacement of any tree planting which is not successfully established in the first instance.
After Use	Use of former minerals and waste sites after they have been restored.
Aggregate	Particulate rock / mineral matter which is suitable for use (on its own or with the addition of cement or bituminous material) in construction as concrete, mortar, finishes, road stone, asphalt, or drainage course, or for use as constructional fill or railway ballast.
Amenity	Pleasantness / quality of life value. An “amenity” land use can include formal and informal recreation and nature conservation.
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 where 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	Share of the regional demand for aggregate to be met from land won sand and gravel in each Mineral Planning Authority.
Aquifer	A water-bearing geological formation. Water may percolate along an aquifer, following the gradient of the stratum. An aquifer is generally located between two impervious layers.
Area of Outstanding Natural Beauty (AONB)	Area of countryside designated by the Countryside Agency with the primary objective of conserving its natural beauty.

B

Best Practicable Environmental Option (BPEO)	This has been defined by the Royal Commission on Environmental Pollution as “ <i>the outcome of a systematic consultative and decision making procedure which emphasises the protection and conservation of the environment across land, air and water. The BPEO procedure establishes for a given set of objectives, the option that provides the most benefits or the least damage to the</i>
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environment, as a whole, at acceptable cost, in the long term as well as in the short term”.

Best Value	Places a duty on local authorities to deliver services (including waste collection and waste disposal management) to clear standards – covering both cost and quality – by the most effective, economic and efficient means available.
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”.
Borrow Pit	Minerals working solely to provide materials for a specific and major construction project and normally close to the works.
Brownfield Site	Site previously used for or affected by development. It may be abandoned or in a derelict condition.
Buffer Zone	A zone or area that separates waste management facilities and mineral workings from other land uses to safeguard local amenity.
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 Scheme (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, remainder materials and off-cuts.
Crushed concrete	Concrete from demolition sites, crushed and reused as aggregate for construction
D	
Demolition Waste (See also Construction 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) Document setting out a developers assessment of a project's likely environmental effects, i.e. the results of the Environmental Impact Assessment.

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 are now generally classified as “hazardous”, “non-hazardous” or “inert” in order to define different pollution potential s and handling requirements. The full definition and list of wastes may be viewed on the internet at http://europa.eu.int/eur-lex/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 County Council to which the public may deliver non-business waste and at which a range of materials (eg 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.
Hydrological Survey	A field study of the hydrogeology of a specific area.
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 Foundry Industry 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.
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 1 st 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.
Life Cycle Assessment	Life Cycle Assessment (or life cycle analysis) is an integrated "cradle to grave" approach to assess the environmental performance of products and services throughout their lifetime, from creation to final disposal.

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 Area	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.
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Municipal Waste	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.
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N

Non-Fossil Fuel Obligation (NFFO)	A requirement on regional electricity companies in England and Wales to purchase from specified producers, at a premium price, for a fixed period, specified amounts of electricity generated by methods other than burning fossil fuels.
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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.
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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.
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O

Overburden	Material (Soil, clay or rock) which must be removed before extracting the mineral deposit beneath it.
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P

Permitted Reserves	Mineral Deposits that have planning permission for extraction
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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).
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Primary Minerals	Virgin minerals (i.e. not recycled or produced as a by-product of other processes)
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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 policy MPG15
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Proximity Principle	Waste should be disposed of (or otherwise managed) 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. Where waste cannot be
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disposed of reasonably close to its source, then priority should be given to the use of rail or water transport where this would reduce the overall environmental impact and is economically feasible.

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 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.
Recovery	Recovery of useful value from waste – includes recycling, composting 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, ie 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 re-circulation systems or distillation units.
Regional Self-Sufficiency	A key aim of government sustainable waste management policy (see PPG10). Regional self-sufficiency means that each region should provide sufficient facilities to manage the quantity of waste that is expected to be generated within that region.
Regionally Important Geological Sites (RIGS)	Geological or geomorphological sites, excluding SSSIs, which are considered worthy of protection for their educational, research, historical or aesthetic importance.

Restoration Process of returning a site or area to its former or other appropriate future use following mineral extraction/waste disposal.

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 English Nature whose responsibility is to protect these areas. They are important areas for nature conservation, i.e. valuable flora, fauna or geological strata. English Nature must 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.

Special Waste (See also Hazardous Waste) Term previously used for waste that is dangerous or difficult to treat, keep, store or dispose of, so that special provision is required for dealing with it. (1990 EPA 5.62 and s.79 (9)). The term is no longer used, and most special wastes are now “hazardous” wastes under EU waste classification.

Sustainable Development The concept of reconciling economic development with environmental protection and social well being. A widely quoted definition of this concept is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. The definition also encompasses the efficient use of natural resources.

T

Tonnes Metric tons. One tonne weighs a little less than one imperial ton. (One ton = 1.016 tonnes)

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	Conceptual framework to guide determination of the Best Practical Environmental Option for management of wastes. Sets out a general order of preference: – reduction – re-use recycling/composting – energy recovery – disposal . . 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.
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 Management Strategy	A document setting out a medium-long term strategy for waste management.
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.

Appendix 4: Forest of the Marston Vale Aims and Objectives

(from The Forest of Marston Vale Forest Plan 2000)

Refer to Map 1

The aim of the national programme of Community Forests is to achieve major environmental improvements around towns and cities. They will be attractive areas, rich in wildlife, with associated provision for access, leisure and education, thereby making them better places in which to live, do business and enjoy leisure time.

The corporate objectives agreed by the Department of Environment, Transport and the Regions and the Ministry of Agriculture Fisheries and Food which each Community Forest has adopted are:

- To regenerate the environment of the Green Belt and equivalent areas, where it is public policy to keep it open, and help to ensure that it is permanently green and open;
- To improve the landscape of the area, including reclamation of derelict land, to create a visually exciting and functionally diverse environment;
- To increase opportunities for sport and recreation, including artistic and cultural events, and access;
- To protect areas of high quality landscape or historical or archaeological interest;
- To protect sites of nature conservation value and create new opportunities for nature conservation;
- To provide new opportunities for educational use of the area, and ensure the mosaic of habitats in the forest can be used for the full range of environmental educational needs of the surrounding schools. Also to ensure that urban schools are not disadvantaged in meeting the needs of the National Curriculum;
- To protect the best agricultural land and increase opportunities for farm diversification elsewhere in accordance with Government agricultural and local planning policies;
- To establish a supply of timber and other woodland products;
- To achieve a high level of local community commitment to the concept and involvement in its implementation;
- To give public and private sector confidence in the long-term prospects for the area and to provide a proper base for investment. To improve the environment near housing and local industry and to increase the value of properties and businesses;
- To seek private sector support to implement the forest and to invest in leisure and other relevant service sectors;
- To create jobs in the new woodland industries, both management of woodland and use of the raw materials. To create jobs in the leisure industry developed in and around the Community Forest. To sustain other local jobs by providing an outstanding environment as a comparative economic advantage over competitor areas;
- To complement the Government's priorities for inner cities, by providing for associated leisure and open space needs at the physically closest locations;
- To remain flexible in the light of changes, such as in the leisure market.

Appendix 5: Greensand Trust Aim and Objectives

Refer to Map 1

Aim

To work in partnership with landowners and local communities to conserve, and where possible, enhance the distinctive characteristics of the Greensand Ridge, its attractive landscape, diverse wildlife and rich historical heritage, whilst providing increased opportunities for local people and visitors to understand and enjoy their environment.

Objectives

1. Conserve and enhance the management of key wildlife, landscape and historic heritage in the Trust area.
2. Develop, improve and promote public rights of way networks and other forms of informal recreation.
3. Develop creative landscape and habitat restoration projects to increase the area of key features, to link fragmented habitat and to contribute to the general conservation of biodiversity.
4. Encourage and support the involvement of people in the conservation and enhancement of the local environment.
5. Increase awareness of nature conservation, archaeology and historic landscape amongst owners and the general public and promote the need for their protection and management.
6. In partnership with local communities, landowners and industry, identify priorities, develop action and secure appropriate resources for initiatives in the Trust area.
7. Collect information and increase out knowledge of the area to include existing wildlife, archaeology, landscape, recreation, access and mineral extraction interest.

NB: The order of these objectives in no way reflects relative priority.

Appendix 6: Ivel and Ouse Countryside Project

Refer to map 1

Mission

The Ivel and Ouse Countryside Project works, in partnership with others, to maintain and develop a high quality, sustainable and distinctive natural environment in the Ouse and Ivel valley areas. The service reflects the needs of the valley communities and those that visit the areas, through creating an environment, which is rich in recreation opportunities, wildlife, landscape and heritage.

Aims

1. To promote and support sustainable land management and integrated rural development
2. To conserve and enhance biodiversity, landscape and heritage interest
3. To increase public awareness, understanding and enjoyment of the countryside and of biodiversity, landscape and heritage interest
4. To develop and manage countryside access and recreation opportunities for all
5. To foster and support community development and involvement in environmental management and interpretative work
6. To support the development of socio-economic programmes which contribute towards furthering service aims.

Objectives

1. To maintain, develop and promote the public rights of way network to meet the needs of the local community
2. To maintain, develop and promote countryside access and recreation opportunities for all, including socially disadvantaged.
3. To maintain and enhance existing wildlife habitat, landscape and heritage interest.
4. To create and maintain new wildlife habitat and landscape features.
5. To enhance degraded natural environments in both urban and rural locations.
6. To produce leaflets, information boards and other promotional/ interpretative material.
7. To use and support art based activities as a means of interpreting wildlife, landscape and heritage interest.
8. To develop and promote environmental education opportunities and facilities for all.
9. To provide opportunities for all to participate in environmental management work.

Service areas

1. Strategic planning
2. Stakeholder partnership development and management
3. Environmental project and contract management
4. Site management plan production
5. Wildlife habitat and species surveys
6. Environmental feasibility study production
7. Country park and local nature reserve development and management
8. Countryside access and recreation facility development and management
9. Practical estate and habitat conservation work
10. Environmental education provision
11. Environmental information/ interpretation provision and publication
12. Fundraising advice and support for environmental management work
13. Generating external funding and help in kind for environmental management work
14. Community development and consensus building support
15. Leisure, tourism and heritage marketing
16. Conservation volunteering opportunities and volunteer group management and support
17. Training provision to support environmental management work of staff, volunteers and wider community