Gloucestershire
COUNTY COUNCIL





MINERALS & WASTE
ANNUAL MONITORING REPORT
2005 - 2006

The Minerals & Waste Annual Monitoring Report (AMR) is a local development document of the Gloucestershire Minerals & Waste Development Framework

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Core Output Indicators Results

Local Output Indicator Results

1 Introduction to Annual Monitoring

1.1 Overview

The Planning and Compulsory Purchase Act 2004 (PCPA) introduced a new planning system which requires County Councils to prepare Minerals and Waste Development Frameworks (MWDFs). These comprise a suite of documents designed to provide a framework for determining planning applications for waste management operations and mineral workings.

The documents to be included in the framework are as follows :-

- A Minerals and Waste Development Scheme (MWDS), which sets out the timeframe for the production of other MWDF documents;
- A Statement of Community Involvement (SCI), which sets out how and when the community will be consulted on the preparation of local development documents;
- Development Plan Documents (DPDs), which provide the spatial vision, objectives and policies of the framework;
- Supplementary Planning Documents (SPDs), which include additional guidance on the implementation of policies set out in development plan documents; and
- An Annual Monitoring Report (AMR)

Review and monitoring are key aspects of the new system. Annual monitoring is also a statutory requirement. Section 35 of the Act states that all planning authorities must prepare annual monitoring reports containing information on the preparation process for their local development frameworks, including minerals & waste development frameworks. The AMR should review the extent to which policies set out in development documents are being achieved.

Monitoring is thus an essential part of delivering a successful MWDF for Gloucestershire. By providing feedback on plan preparation and policy implementation, annual monitoring enables a comprehensive evidence base to be developed against which the policies contained in development plan documents can be assessed.

This system reflects the Government's approach to the planning system of *'plan, monitor, manage'* and will help identify key challenges and opportunities for the future with regard to minerals and waste development in Gloucestershire.

1.2 Requirements for AMRs

Regulation 48 of The Town and Country Planning (Local Development) (England) Regulations 2004 sets out the key issues an AMR must address and are shown below.

The Key Monitoring Tasks for AMRs

- **Review the 'actual' progress of local development documents against the timetable and milestones of the approved Local Development Scheme (i.e. Gloucestershire Minerals & Waste Development Scheme);**
- **Assess whether policies and targets in local development documents have been met or progress is being made towards them or, where they are not being met or not on track to being achieved, the reasons why;**
- **Identify the impacts of policies in local development documents on national and regional policy targets;**
- **Assess whether policies in local development documents need adjusting or replacing because they are not working as intended and / or as a consequence of changes in national and regional policy;**
- **Identify the significant effects resulting from the implementation of policies in local development documents and their impact upon the social, environmental and economic objectives by which sustainability is defined, and whether these effects are as intended.**

1.3 Annual Monitoring Regime

1.3.1 Overview

Under the *'transitional arrangements'* for converting Minerals & Waste Local Plans to a new MWDF, the policies set out in the both the existing Waste Local Plan (WLP) and Minerals Local Plan (MLP) are to be 'saved' until at least **September 2007**.

The first monitoring report, which covered the period 2004 to 2005, reflected these transitional arrangements by providing an analysis of the 'saved' policies contained within the adopted WLP & MLP.

Progress has been made in producing minerals & waste DPDs to replace the adopted plans. However, in line with the timeframe set out in the MWDS, the 'saved' policies of the existing local plans have not yet been replaced. Consequently, this second monitoring report, covering the period April 2005 to March 2006 remains focused on the existing 'saved' policies of the adopted local plans.

This approach is in conformity with government guidance contained within '*Local Development Framework Monitoring - A Good Practice Guide'.*

1.3.2 Developing the Monitoring Framework

The monitoring framework for minerals and waste was developed as part of the first AMR and adopted an *'objectives-indicators-targets'* method to monitoring.

The setting out of clear objectives, which can be measured using meaningful indicators and targets, provides a workable feedback mechanism to monitor the effective operation of policies. It also delivers an evidence based for identifying where policies may need to be revised.

Figure 1 below illustrates the relationship between these three elements. This provides the structure followed in Section 4 of this report and conforms to the monitoring tasks recommended by government published guidance.

1.3.3 Monitoring Objectives (MOs)

The Monitoring Objectives **(MOs)** used in this AMR are based upon the existing 'saved' policies of the WLP and MLP, and on the sustainability objectives identified at the early stages of our sustainability appraisal (SA) work. The SA process accompanies the preparation of local DPDs and is discussed later in this report.

It is envisaged that the present MOs will be reviewed in subsequent AMRs to reflect changes in policy, which will emerge through the preparation of new DPDs.

1.3.3 Contextual Indicators (CIs)

The Contextual Indicators **(CIs)** establish the *'spatial profile'* for Gloucestershire with a specific focus upon minerals and waste matters. They also set the socio-economic, environmental and demographic background against which minerals and waste planning policies and strategies can operate. Section 3 of this report outlines the contextual characteristics for minerals and waste within Gloucestershire.

1.3.4 Output Indicators (OIs)

Output Indicators **(OIs)** aim to measure quantifiable impacts and events *(e.g. the tonnage of municipal waste collected within a given period)*, which are directly related to the implementation of minerals and waste planning polices. There are two categories of OIs;

- Core Output Indicators (COIs) and
- Local Output Indicators (LOIs);

CORE OUTPUT INDICATORS (COIS) - must be included within the AMR to provide a clear and consistent data source for the strategic monitoring functions of regional planning bodies. In order to achieve this level of consistency, the guidance contained within *Local Development Framework Monitoring - A Good Practice Guide'* defines the COIs to be used in all AMRs.

It is envisaged that the information provided by COIs will be used to develop a 'regional picture' of spatial planning that will inform the preparation of the regional spatial strategies.

For the purposes of the Gloucestershire Minerals & Waste AMR, there are **four** COIs that will require consideration. These are listed below

- **Production of primary land won aggregates**
- **Production of secondary / recycled aggregates**
- **Capacity of new waste management facilities by type**
- **Amount of municipal waste arising, and managed by management type, and the percentage each management type represents of waste managed**

LOCAL OUTPUT INDICATORS (LOIS) - provide information that allows the 'saved' policies within the adopted Minerals and Waste Local Plans and the emerging policies of future development plan documents to be monitored.

Figure 1: Relationship between Annual Monitoring Elements

When combined with the COIs, LOIs should provide sufficient information to continue the development of Gloucestershire's policy monitoring regime and to demonstrate the success of the monitoring objectives set out in the AMR.

1.3.5 Targets

The first AMR included several targets for the monitoring of objectives. These selected targets were chosen to reflect the specific, measurable, timely and desired achievements derived from the monitoring objective they related to.

As annual monitoring progresses, existing targets will be reviewed and expanded upon to reflect emerging policies and objectives of the SA process. The use of targets will be an essential element of monitoring as they provide a measurable tool for assessing whether the rationale of policies and strategies are still valid and are on track to achieve their wider objectives.

1.4 Sustainability Appraisal

The new planning system requires minerals and waste planning authorities to undertake a *Sustainability Appraisal* of emerging DPDs. This process includes the requirements for the EU Directive on *Strategic Environmental Assessment.* The purpose of SA is to promote more sustainable development through better integration of sustainability considerations into the preparation of new policies.

Monitoring is regarded as a key element in the SA process. Government guidance on SA, contained within '*Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks'* provides detail on the necessary monitoring requirements.

In order to demonstrate the linkages between SA and annual monitoring, the relevant SA objectives have been listed under each AMR objective in **Section 4** of this report.

It is envisaged that this process will be refined in future AMRs so as to harmonise with the SA process for emerging DPDs.

1.5 Partnership Working

Involving key monitoring stakeholders at an early stage is essential to the development of a robust dataset and relevant evidence bases which will underpin the AMR system. Appendix D of this report will outline the key monitoring stakeholders involved in the process and the nature of information that they can provide.
To avoid duplication and to encourage consistency regarding shared visions and monitoring approaches, a draft version of the AMR will be sent to each monitoring stakeholder, prior to the formal submission of the AMR to the Secretary of State in December 2006.

2 Contextual Characteristics for Minerals and Waste Planning

Guidance on preparing AMRs recommends using Contextual Indicators (CIs) to provide a quantified description of the wider socio-economic, environmental and demographic background against which minerals and waste planning policies and strategies operate.

This section examines the contextual characteristics of Gloucestershire in relation to minerals and waste planning and in the light of relevant national and regional policy.

2.1 Towards Sustainable Waste Management

As a society the amount of waste we are producing is increasing year on year. Minimising waste at source and using what waste is unavoidably generated as a resource is a key element of the government's policy on sustainable development; *'Securing the Future: The UK Government Sustainable Development Strategy.'*

Developing sustainable solutions for managing waste not only requires decisive action from the community to reduce the amount of waste we produce but also a range of different facilities for dealing with waste in the most environmentally efficient way possible.

While the level of waste we produce continues to increase, traditional options for disposal have become more limited.

For municipal waste, the *Landfill Directive,* and the *Landfill Allowance Trading Scheme (LATS)* introduce challenging targets for reducing the amount which is sent to landfill. Table 1 below shows the LATS landfill targets for the amount of waste which can be disposed of using this method for Gloucestershire. Key target years are highlighted in bold.

In addition to municipal waste there are a range of European Directives that have specific implications for the management of different types of waste streams, including:

- Hazardous Waste
- Packaging & Packaging Waste
- End of Life Vehicles
- Waste Electrical and Electronic Equipment

Delivering sustainable waste management is key to the future of planning for waste and is the fundamental principle behind new national, regional and local policy.

As the Waste Planning Authority (WPA), Gloucestershire County Council has responsibility for making provision for managing all waste streams that fall under planning control. Controlled wastes can be categorised into four groups or 'streams' :-

- **Municipal Solid Waste** (MSW) – *household waste, street sweepings, and a small amount of commercial waste collected by district councils*;
- **Construction and Demolition Waste** (C&D) – *generated on building sites*;
- **Commercial and Industrial Waste** (C&I) – *produced by businesses, shops, manufacturing industries etc*;
- **Hazardous Waste** – *includes some electrical items, batteries, asbestos, incinerator fly-ash, and contaminated soils*.

As already discussed in Section 1 the County Council is required to allocate sites suitable for waste management in the development plan. It is then up to private industry to bring forward planning applications to develop these sites.

Section 3 of this report discusses the preparation of development plan documents for the emerging Minerals and Waste Development Framework (MWDF), while **Section 4** examines the impact of existing waste policies, saved under adopted WLP.

Table 1: LATS Targets for Gloucestershire *(in 000, tonnes)*

Base Year	06	07	08	09	**2010***	11	12	**2013***	14	15	16	17	18	19	**2020***
	158,634	150,100	138,721	124,497	**107,428**	95,471	83,513	**71,555**	68,486	65,416	62,347	59,277	56,208	53,139	**50,069**
Notes * EU Target years in bold															

2.2 National Policy on Waste

In carrying out these duties GCC must take account of relevant national and regional policies. A number of important documents that set the framework for waste planning were produced during the AMR reporting period. A brief policy update is provided below.

Government 's Review of Waste Strategy 2000

The consultation document for the review of England's Waste Strategy 2000 was published on 14 February 2006.

This document highlighted the progress made in moving towards sustainable waste management since the original Waste Strategy 2000 was published in May 2000. It also sought to address a number of key areas for the future, namely:

- A greater focus on waste prevention;
- Viewing waste as a resource and recovering more resources through more integrated approaches to waste supported by necessary infrastructure investment;
- Extending a recycling and re-use culture and setting new targets for recycling and composting;
- Highlighting sustainable waste management in the non-municipal sectors by extending produced responsibility in a range of sectors;
- Securing technologically efficient investment in the treatment of waste at each stage of the chain.

The consultation period ended on 9th May 2006. It found strong support for waste minimisation, the setting of more ambitious waste reduction targets and greater emphasis on education.

The final outcomes of the review will be reported as part of the third AMR covering the period 2006 to 2007.

Planning Policy Statement 10: Planning for Sustainable Waste Management (PPS10)

PPS10 was published in July 2005 and forms part of the national waste management plan for the UK. It replaces Planning Policy Guidance Note 10 (PPG10).

PPS 10 seeks to break the link between economic growth and waste generation by promoting more sustainable waste management and moving the management of waste up the *'waste hierarchy'* of; reduction - reuse - recycling & composting - recovering value - and disposal as a last resort.

The document sets out the planning objectives and decision-making principles that waste planning authorities must take into account in developing local development plan documents and deciding planning applications. The objectives are summarised as follows:

- Help to deliver sustainable waste management by using the waste hierarchy to deal with waste matters;
- Provide a framework in which communities take more responsibility for their own waste;
- Support the national waste strategy and contribute towards the UK's European obligations;
- Secure the recovery and disposal of waste whilst protecting human health and the environment;
- Balance the concerns, interests and needs of communities, waste collection authorities, waste disposal authorities and businesses;
- Protect green belts but recognise the particular locational needs of some types of Waste Management Facilities (WMFs); and
- Ensure the design and layout of new development supports sustainable waste management.

PPS10 also states that when considering applications for waste management facilities, waste planning authorities should consider the likely impact on the local environment and on amenity. Annex E of PPS 12 provides a list of twelve locational criteria that should be considered for waste planning applications.

The accompanying companion guide to PPS10 also provides a detailed resource for waste planning. This Guide provides advice, ideas and examples of current practice and signposts to further information to support the implementation of PPS10.

2.3 Regional Policy on Waste

At a regional level, government polices are to be reflected through a Regional Spatial Strategy (RSS). For the South West region a submission version RSS was published for public consultation in June 2006. As this falls outside of the AMR period, detailed policy outcomes will be reported within the 3rd AMR covering the period 2006 to 2007.

However, under transitional arrangements, regional policies for waste (and minerals) are contained within the existing Regional Planning Guidance for the South West (RPG10).

Policy RE5 of RPG10 emphasises the need for co-operation between the Environment Agency, waste planning authorities, waste disposal authorities and waste management companies in order to achieve a mix of waste recovery methods and facilities both regionally and sub-regionally.

The policy also sets out regional targets for composting, recycling and recovery of value in order to reduce the amount of waste going to landfill.

Once adopted the policies in the RSS will supersede all of the policies contained within RPG10 and the existing strategic policies currently included within the County Structure Plans which cover the region.

The emerging policies on waste management in the RSS draw heavily on those within the Regional Waste Strategy 2004 *"From Rubbish to Resource"* and require WPAs to make provision for a network of strategic and local sites for waste collection, transfer, treatment, and disposal to meet the allocations for each waste stream. In identifying such sites WPAs should take account of reusing previously developed land, using existing industrial sites and co-locating complementary activities.

Emerging policy W2 also stresses the need to locate facilities close to the source of waste arisings *(i.e. Proximity Principle)*. Other draft RSS policies promote waste minimisation on large developments and seek to address the issue of future provision for hazardous waste.

2.4 Gloucestershire Structure Plan

The Gloucestershire Structure Plan Second Review (1999) has been saved under transitional arrangements for at least until September 2007, or until replaced by the Regional Spatial Strategy. The waste policies contained within the Second Review remain unchanged.

2.5 Waste Management in Gloucestershire

2.5.1 Waste Targets

Table 2 shows the sub-regional targets for each waste stream and the means by which they should be treated.

Source separation includes all municipal waste collected and segregated by material at source i.e. Kerbside collections, bring banks, household waste recycling centres.

Secondary treatment refers to waste technologies that can treat residual waste streams from household (waste that cannot be recycled or composted) i.e. mechanical and biological treatment, energy from waste etc.

Within the Commercial and Industrial (C&I) stream, recycling refers to source separated materials such as paper and metals. Recovery refers to materials handled via waste transfer stations and treatment facilities.

With regard to Construction and Demolition (C&D) waste, treatment refers to the reuse of materials as aggregates for roads or construction.

Table 2: Regional Waste Management Strategy Targets for Gloucestershire

Municipal Solid Waste (MSW)			
Target Year	Minimum Source Separated	Maximum Secondary Treatment	Maximum Landfill
2010	130,000	80,000	160,000
2013	150,000	120,000	130,000
2020	170,000 (45% minimum)	200,000	60,000
Commercial and Industrial Waste (C&I)			
Target Year	Recycling/ Reuse	Recovery	Landfilled
2010	260,000 – 280,000	150,000 – 180,000	285,000 – 315,000
2013	270,000 – 300,000	170,000 – 190,000	240,000 – 260,000
2020	300,000 – 320,000 (44% minimum)	260,000 – 290,000 (39% minimum)	110,000 – 120,000 (17% maximum)
Construction and Demolition Waste (C&D)			
Target Year	Treatment	Transfer	Landfill
2010	70,000	110,000	210,000
2013	70,000	110,000	210,000
2020	70,000	110,000	210,000

2.5.2 Waste Arisings

The Environment Agency (EA) is responsible for collecting data on the amounts of waste handled by individual facilities. During the AMR period the most up-to-date figures available from the EA were from 2002/2003.

However, as the County Council is also the Waste Disposal Authority, municipal waste data is available for the period 2004/2005.

Table 3 : Managed Waste in Gloucestershire ('000 Tonnes)		
Waste Stream	**Base Year**	**Total**
MSW	2004/05	309
C&I (including metals)	2002/03	599
C&D	2002/03	418
Hazardous	2002/03	46
Total		**1,372**

As part of evidence gathering for the Waste Core Strategy Issues and Options Paper, GCC has participated in ongoing liaison with the Environment Agency on developing a common reporting system on data for waste facilities in the South West Region.

This had included workshops on data collection and ongoing communication between officers in both organisations.

In addition the council has carried out extensive research into the amounts of each waste type generated within the county and the handling capacity of facilities for each waste stream.

GCC will continue to work with key partners and stakeholders on the issue and it is anticipated that an agreed set of figures will become available in the forthcoming year and will be published in the third AMR. Provisional figures for each waste stream are discussed later in this report in Section 4, under **AMR Objective 11**.

2.5.3 Providing Waste Management Facilities

Managing each of the above waste streams requires a network of different facilities at varying scales, capable of handling one or more types of waste. The issuing of waste management licenses is the responsibility of the Environment Agency, who are also responsible for monitoring and enforcing pollution control matters.

Information supplied by the Environment Agency listed **111** sites with waste management licenses within the county in 2005-2006 of which **79** were classified as *operational.* In addition there are **760** registered exempt waste management operations within the county.

For the purposes of the AMR, the types of facilities that have been identified are based upon definitions used by the Environment Agency and within the Waste Local Plan. Gloucestershire's first AMR defined five waste types and two sub-categories of waste. These are listed in Appendix F.

It is important to note that certain waste sites are multi-functional in the operations that they carry out. As a result the number of licensed waste management operations in the county exceed the total number of actual sites.

2.5.4 Preferred Sites in the Waste Local Plan

The WLP identifies a number of *'Preferred Sites'* and *'Areas of Search'* for locating waste management facilities. These are the cornerstone of the Plan's provision, and are the principle mechanism for guiding Gloucestershire towards sustainable waste management.

The allocations are divided into two groups, according to their potential capacity and the area(s) they are likely to serve. A benchmark capacity of 50,000 tonnes per annum is used to distinguish between 'Strategic' (50,000 tonnes and above) and 'Local' *(District)* (below 50,000 tonnes) sites. This figure was chosen based upon the point at which an Environmental Impact Assessment (EIA) is likely to be required to as part of any planning permission. A detailed breakdown of the allocations identified in the WLP is shown in Appendix C.

The objective of the identified WLP allocations, is to facilitate the development of a combination of facilities and sites that can meet future demands for waste management within the county. The allocations in the WLP retain a degree of flexibility as to the style and type of waste facilities and technologies that may be acceptable in order to ensure appropriate provision can be made for present and future waste demands.

Nevertheless, the WLP provides an indication of what might be acceptable at individual sites, based upon waste management options, capacity, and the likelihood of adverse impacts being mitigated. Chapter 4 of the WLP contains a detailed profile and a list of potential operations for each site.

To assess the ability of the WLP to promote and realise its provision for future waste management facilities, a review of all new applications submitted upon the preferred waste sites has been considered in Section 5, under **AMR Objective 10**.

The review considers whether or not waste proposals have been granted permission, the type and nature of the development, and the associated planning restrictions imposed upon operations by condition or legal agreement.

2.6 Minerals - National Policy Context

The government has set out a programme for replacing its existing series of Mineral Policy Guidance Notes (MPGs) with three Minerals Policy Statements (MPSs). These statements will be accompanied by a number of appendices that will provide detailed policy advice on the provision of specific minerals, environmental impacts, and other mineral policy matters.

At present, only MPS2 - *Controlling and Mitigating the Environmental Effects of Mineral Extraction* has been formally published (March 2005). This MPS provides government policy on the potential environmental considerations, including public health and amenity, resulting from new and extensions to, existing minerals operations. It is supported by two technical annexes covering noise and dust.

A consultation draft version of MPS1 was produced in December 2004. This was supported in February 2005 by four consultation draft technical annexes. A brief review of consultation draft MPS1 and the four technical annexes is provided below :-

Consultation Draft MPS1

Consultation draft of Minerals Policy Statement 1 *'Planning and Minerals'* sets out the government objectives for achieving sustainability in minerals planning. These objectives are :

- To conserve and safeguard mineral resources;
- To protect internationally and nationally important designated sites for landscape and nature conservation from minerals development;
- To secure supplies of minerals from environmentally acceptable sources to meet the needs of society and the economy;
- To ensure the outcomes of the mineral industry are consistent with achieving national economic growth, productivity and performance;
- To secure sound working practices to minimise the impacts of mineral extraction;
- To minimise the production of mineral waste;
- To promote the efficient use of minerals and greater application of recyclable materials; and
- To protect the environment and seek to enhance its overall quality through high standards of restoration.

Consultation draft Annex 1 to MPS1

Technical Annex 1 to MPS1 is concerned with making provision for aggregates. This means making sure there is enough supply of minerals now and in the future.

Until the final version of the Annex 1 to MPS1 is published, national policy for aggregates remains within the existing Minerals Planning Guidance Note 6 (MPG6*): Guidelines for Aggregate Provision in England* and *Revised National & Regional Guidelines for Aggregate Provision in England (2001 - 2016).*

On final publication of Technical Annex 1 to MPS1, the revised aggregate guidelines will also need to be read alongside it.

Consultation Draft Annexes 2 & 3 to MPS1

Technical Annex 2 and Technical Annex 3 provide national policy for brick-clays and building & roofing stone respectively. These annexes seek to ensure sufficient supplies are secured from environmentally acceptable resources. This may be achieved through safeguarding and/or by identifying new areas for extraction. Both annexes also recognise the need for sufficient supplies to meet the needs of specialist markets, especially for maintaining and repairing the country's built heritage.

Consultation draft Annex 4 to MPS1

Technical Annex 4 is concerned with providing detailed development control advice on determining planning applications for the exploration of onshore oil and gas. There are no provision requirements for either of these minerals. The issues of onshore oil and gas my be of relevance to Gloucestershire in the future but at present only initial exploration for these minerals has been carried out.

2.7 Regional Policy on Minerals

Polices RE10, RE11 and RE12 of the draft RSS deal with minerals resources in the South West.

These policies highlight the need for MPAs to make sufficient provision to meet the national and regional requirements for aggregates and to safeguard minerals resources from other forms of development.

They also promote the use of sustainable forms of delivery and transport *(i.e. rail and water)* and promote the use of secondary and recycled aggregates.

Until the RSS is adopted, the apportionment guidelines set out in MPG6 will apply (current 1992-1996 figures). However, the emerging RSS local apportionment process will be an important material consideration in new planning proposals and will guide future policy work.

The new apportionment guidelines identify that approximately 680 mt of aggregates *(453 mt of crushed rock, 106 mt of sand and gravel, and 121mt of alternatives)* would be required from the South West Region up to 2016.

The local (sub-regional) apportionment of these figures was agreed following the work of the South West Regional Aggregate Working Party (SWRAWP). The resulting figures are shown in Table 4.

Table 4: Sub-Regional Apportionment of Aggregates for Gloucestershire 2001 – 2016 (revised figures)		
Aggregate Mineral	Revised sub-regional apportion-ment for Gloucester-shire (2001 – 2016)	Annual Expression (2001 – 2016)
Crushed Rock	39.09 mt	2.44 mtpa
Sand & Gravel	18.18 mt	1.14 mtpa

These figures translate into an annual requirement termed the *annual expression* and can be seen in Table 4. For crushed rock this represents 9% of the regional apportionment; for sand and gravel it is 17% of the regional apportionment.

2.8 Minerals Resources in Gloucestershire

Gloucestershire has a diverse geological base of mainly sedimentary rocks that includes compacted clays, silts, sands, sandstone and limestone. They provide significant deposits of minerals of actual and potential economic worth, including hard rock for aggregates and natural building materials, coal and clay.

In addition to these rocks the river valleys of the Thames and Severn / Avon, contain various superficial deposits of silts, clays, sands and gravels. They are important sources of sand and gravel for the construction industry.

As a result Gloucestershire is an important source of minerals supply, principally for aggregate use in the construction industry. The aggregate minerals for the county comprise of Carboniferous and Jurassic limestone (commonly known as 'crushed rock') and sand & gravel.

Table 5 sets out the mineral resources for the county based on clear physiographic areas of Gloucestershire:

Table 5: Physiographic area & mineral types of Gloucestershire		
Physiographic Area	Mineral Type	
Cotswolds	Clay	Limestone (Jurassic)
Forest of Dean	Clay	Limestone (Carboniferous)
	Coal	Iron Ore
Severn Vale	Clay	Sand & Gravel
Upper Thames Valley	Clay	Limestone (Jurassic - Cornbrash)
	Sand & Gravel	
Vale of Moreton	Sand & Gravel	

2.8.1 Aggregates Resources

Minerals contribute greatly to our prosperity and quality of life, and are major factors in developing sustainable communities.

Aggregate minerals provide the raw materials for building homes, roads, schools and hospitals and are essential to many industrial processes.

Aggregates in the County fall into two distinct types; limestones, which are crushed; and sand & gravel. Aggregates are the most significant minerals extracted in Gloucestershire in terms of both the amount produced and the land area they cover.

2.8.2 Aggregate Reserves and Production

Between 1994 and 2003 the supply of sand and gravel equated to an average of 0.79 million tonnes per annum (mtpa). Over the same period the average crushed rock supply amounted to 2.11mtpa.

In order to ensure that there are sufficient reserves to meet current and future demand it is necessary to maintain a stock of planning permissions for the winning and working of minerals. Such a stock is referred to as a ***landbank.***

A landbank is defined as *'the sum in tonnes of all permitted reserves with valid planning permission (including dormant or current non-working sites) at a specific time.*

Guidance in MPG6 requires MPAs to maintain a landbank of at least 7 years for both crushed rock and sand & gravel, based upon the local apportionment figures and the associated annual expression.
The remaining landbank is measured in terms of the number of years supply of minerals available at a given point in time based upon the annual expression of the local apportionment of the regional guidelines.

Further details on up-to-date annual aggregate production and landbank reserves can be found under **AMR Objective 6.**

2.8.3 Natural Building Stone Resources

As well as being an important source of aggregates, Gloucestershire also contains locally important sources of natural building stone materials *(i.e. walling, tiling, paving, block stone and dimension stone)*. The mineral types used for these purposes include limestone and sandstone.

Natural building stone occurs in two distinct areas of Gloucestershire, namely the Forest of Dean and the Cotswolds. In the Forest of Dean, natural building stone sources are derived from Carboniferous

limestones and sandstones, whilst in the Cotswolds it is derived exclusively from limestone of the Jurassic period.

The working of natural building stone occurs at a range of different scales and intensities when compared with the larger scale working of aggregate minerals. A number of the larger limestone aggregate workings also supply natural building stone, as the occurrence of this resource is similar in both mineral type and distribution. The relative percentages of aggregate and natural building stone produced on such sites can vary considerably depending upon the specification, volume of material, and market requirements.

In addition a number of specialist operations supply a variety of natural building stone products such as walling, tiling, rockery, paving and dimension stone. The intensity of these operations is also heavily influenced by the specification, availability and market requirements of the stone. As a result production trends for natural building stone can vary considerably from site-to-site and from year-to-year, and are subject to greater supply variations than the county's aggregate resources.

2.8.4 Clay Resources

Gloucestershire's clay resources are used for a variety of purposes including the manufacture of bricks, tiles and piping systems, as bulk fill for construction projects, site cover at waste disposal sites, and for various flood defence works. The county's clay resources are widespread and extensive, predominantly occurring in four of the county's physiographic areas, namely; the Cotswolds, Forest of Dean, Severn Vale and Upper Thames Valley.

In addition to clay extraction for brick-making, a number of sites also have extant permissions for the working of clay. Examples include extraction to provide engineering material *(i.e. landfill cap and lining)*, and as a means of accessing an underlying reserve *(i.e. underlying sand & gravel resources in the Upper Thames Valley)*. Due to the on-site nature of these operations there is no recordable data on the amount of clay extracted for these purposes.

2.9 Preferred Areas for Future Minerals Extraction from the adopted Minerals Local Plan

Minerals constitute a finite resource but can only be worked where they occur. The MPL has identified nine preferred areas for minerals extraction in the county, shown in Table 6 below.

Table 6: Preferred Areas for future aggregate extraction in Gloucestershire

Preferred Area	**Site Area** *(in hectares)*	**Potential Aggregate Mineral to be Extracted**	**Estimated Mineral Yield *** *(in million tonnes)*
Stowehill / Clearwell	40.9 ha	'Crushed Rock' – Carboniferous limestone	8 mt
Drybrook	11 ha	'Crushed Rock' – Carboniferous limestone	4.5 mt
Stowfield	14.5 ha	'Crushed Rock' – Carboniferous limestone	10.2 mt
Daglingworth	18 ha	'Crushed Rock' – Jurassic limestone	9 mt
Huntsmans	62 ha	'Crushed Rock' – Jurassic limestone	7.5 mt
TOTAL ESTIMATED MINERAL YIELD FOR 'CRUSHED ROCK' FROM MLP PREFERRED AREAS			**39.2 mt**
Dryleaze Farm	37 ha	Sand & gravel	1.75 mt
Cerney Wick	16.5 ha	Sand & gravel	0.5 mt
Horcott / Lady Lamb Farm	100 ha	Sand & gravel	3.0 mt
Kempsford / Whelford	185 ha	Sand & gravel	6.0 mt
TOTAL ESTIMATED MINERAL YIELD FOR SAND & GRAVEL FROM MLP PREFERRED AREAS			**11.25 mt**

These have been identified on the basis of their suitability for mineral extraction, both in terms of the existence of commercially exploitable reserves and of least impacts resulting from mineral extraction.

For each preferred area the plan identifies environmental and other constraints existing within each area (i.e. landscape, hydrogeology, archaeology, neighbouring land uses).

Applications for mineral working in these areas must address the constraints identified within each area.

2.10 Minimising the Impacts of Minerals & Waste developments

Minerals and waste developments can have significant impacts on the surroundings. The MLP and WLP contain policies aimed at minimising these impacts and promoting increased sustainability.

In addition to sites selection strategies, both local plans include a range of policies to minimise the impact of future developments. These policies focus on delivering the following headline objectives :-

- Increasing environmental protection;
- Safeguarding amenity and public health;
- Improving reclamation of sites; and
- Minimising waste.

2.10.1 Increasing Environment Protection

The winning and working of minerals and the management of waste can have a significant effect on the local environment. The aim of the County Council as Minerals Planning Authority (MPA) and Waste Planning Authority (WPA) is to limit adverse environmental impacts and where possible seek to enhance the environment in line with the principles of sustainable development.

In determining new minerals and waste proposals the County Council aims to strike a balance between the social-economic needs proposals and the protection of environmental assets. For the purposes of the AMR environmental assets are defined as the full range of ecological, geological, landscape, and heritage designations recognised within the minerals and waste local plans.

2.10.2 Safeguarding Amenity and Public Health

For Minerals Developments:

Chapters 2 and 9 of the MLP provide a number of characteristic impacts on amenity and public health that may result from mineral operations.

Whilst the size, scale, location and nature of each mineral proposal being determined will have a major consequence on the relevance of each impact, the list below provides an initial outline of the key issues that regularly concern mineral developments:

- Control of noise, dust, blasting, vibration and flyrock;
- Air pollution – *including the control of emissions from smoke, fumes and gas*;
- Control of site lighting;
- Safeguarding the water environment – *including hydrological pollution*;
- Traffic restrictions – *including vehicle cleaning and lorry sheeting*; and
- Land instability and subsidence.

Policy 36 of the WLP requires the preparation of waste management statements to demonstrate how waste generated during the construction phases of a development and subsequent occupation, can be minimised and/or managed in a more sustainable way.

For Waste Developments:

Chapter 5 of the WLP reflects the guidance set out in PPS10 and identifies a number of recurring development control considerations for public health and amenity impacts: -

- The hours of operation;
- Transport, traffic and access - *including HGV generation, distribution, maximum daily flows, means of access, highway safety, capacity of highway network*, and;
- Generation of noise, vibration, odour, fumes (e.g. air pollution), dust, litter, and attraction of scavengers and vermin.

In addition Policies 37 – 41 of the WLP demonstrate how the issues of appropriate performance requirements and amelioration measures can be considered when determining planning applications for waste developments.

Information on amenity and public health impacts recorded during the AMR monitoring period are discussed in more detail in Section 4 under **AMR Objective 2.**

2.10.3 Reclamation of Sites

Minerals working and some types of waste developments *(such as landfill / landraise)* are not considered to be permanent uses of land. As such careful consideration must be given to maximising the environmental opportunities and public benefit from reclaiming these sites once operations have ceased.

Depending upon the variety of different and often complex site factors such as; landscape, ecology, environmental character, soils, levels of site pollution and contamination, final topography, funding potential and local amenity, a range of reclamation schemes can be realised.

Information on reclamation of sites for the AMR monitoring period can be found in Section 4 under **AMR objective 3.**

2.10.4 Minimising Waste

As outlined previously in this AMR, the WLP seeks to encourage the movement of waste up the '*Waste Hierarchy' ,* where the reduction and reuse of waste materials takes precedent.

Although the majority of policies in WLP are concerned with pursuing the development of more sustainable ways of managing waste, it does include a proactive policy (Policy 36), which supports waste reduction.

Under the new planning system, the County Council considers Policy 36 and waste minimisation to be one of its headline waste policies that should be actively promoted. Consequently, a Supplementary Planning Document (SPD) has been prepared to support the implementation of Policy 36. Information on the preparation of this SPD can be found in Section 2 of this AMR report.

The inclusion and consideration of waste minimisation during the early stages of the planning application process is crucial to its subsequent successful implementation. Under Gloucestershire's two-tier system of local government, this can only be achieved through partnership and co-operation between the constituent planning authorities *(i.e. Cheltenham Borough, Cotswolds, Forest of Dean, Gloucester City, Gloucestershire County, Stroud, and Tewkesbury Borough).*

The SPD seeks to engender a greater understanding of the waste minimisation issues for operators, the construction industry and for the responsible planning authorities. A key focus for annual monitoring is to assess how successful the issue of waste minimisation has been incorporated into the decision-making process for new development proposals.

Monitoring information on the implementation of waste minimisation can be found in Section 4 under **AMR Objective 4.**

Minerals planning also has an important role to play in '*minimising waste'* through better use of resources on-site and by supporting greater recycling of waste materials as a substitute for new minerals.

Monitoring information on the use of recycled waste for minerals has been identified as a Core Output Indicator (COI) for AMRs, and will, in turn inform the regional monitoring scheme. Data concerning this indicator can be seen in Section 4 under **AMR Objective 6**.

2.11 Development Monitoring & Enforcement

In order to ensure that minerals and waste developments are sustainable, and that the environment is protected and where possible enhanced, effective monitoring of the conditions attached to planning permissions is essential.

The government has recently approved regulations that make provision for minerals and waste planning authorities to charge minerals and landfill operators a fee for carrying out site visits related to monitoring.

During this AMR period the Council reviewed the minerals and waste enforcement and monitoring policy statement to reflect government regulations.

The new regulations will be implemented during the next AMR period and an assessment of the revised monitoring system will be reported in the 2006/07 AMR.

The implementation of a revised Monitoring and Enforcement Policy holds the possibility of developing joint AMR objectives and indicators, particularly in relation to AMR Objectives 2 & 3. The Local Output Indicators for these objectives will be reviewed in light of the emerging policy.

3 Minerals and Waste Development Scheme Monitoring

One of the key requirements for annual monitoring is to review 'actual' progress made in producing Development Plan Documents (DPDs) against the timetable set out in the approved Minerals and Waste Development Scheme (MWDS).

Where DPDs do not meet their relevant milestones, the AMR should include an assessment as to the reasons for this.

3.1 Summary of Production in 2005 – 2006

3.1.2 Minerals & Waste Development Scheme

Gloucestershire County Council published its first MWDS in May 2005 following approval by the Secretary of State (SoS). It covered the three-year period from May 2005 to May 2008.

In March 2006 Government Office for the South West (GOSW) advised that a revised MWDS would be required in order to maintain a 3-year rolling programme of plan production. This updated MWDS could also be used as a mechanism for identifying revisions to existing production milestones, where necessary.

A revised MWDS covering the period 2006 to 2009 was submitted to GOSW in June 2006 and was approved by the Secretary of State in August 2006. Production of this revised MWDS falls outside of the AMR monitoring period will be reported upon in the next AMR.

3.1.3 Statement of Community Involvement (SCI)

The Gloucestershire Statement of Community Involvement (SCI) was adopted in December 2005, following an Examination in Public (EIP) under *'written representation'* in October 2005. The binding Inspector's Report for the SCI was published in November 2005.

3.1.4 Waste Core Strategy (WCS)

In June 2005, front-loading exercises commenced on the WCS. These initially focused upon gathering an evidence base on waste arisings and facility capacities within Gloucestershire. Liaison with the Environment Agency (EA) and the Waste Collection Authority (WCA), was augmented by a waste operators' survey in December 2005.

A Minerals & Waste Newsletter was produced in November 2005 and sent to over 1200 stakeholders. This Newsletter formed part of informal consultation under Regulation 25.

On 22 March 2006 a Joint Stakeholder Consultation Forum was held in Gloucester to discuss future waste planning and waste management issues affecting the county. The key focus of the forum was the emerging Waste Core Strategy (WCS) and Municipal Waste Management Strategy (MWMS).

3.1.5 Minerals Core Strategy (MCS)

In June 2005, front-loading exercises commenced on the MCS. These initially focused on developing the existing evidence on minerals data and included completing the annual mineral survey programme for the year 2004.

As with the WCS, a Minerals & Waste Newsletter was published in Nov 2005 to introduce the MCS and invited those with an interest in mineral issues to submit their comments. This newsletter formed part of an informal consultation for the MCS under Regulation 25.

3.1.6 Waste Minimisation SPD

Initial research on the Waste Minimisation SPD began in June 2005, identifying current best practice and key issues for inclusion in the document.

An Expert Group Forum was then convened in Sept 2006 for waste operators and key stakeholders. This forum was supported by a special Minerals & Waste Newsletter, sent to over 1200 stakeholders, which publicised the SPD and invited interested stakeholders to submit their comments.

An informal draft of the SPD was published and circulated to officers in District Councils during October 2005. This document was also made available for public comment between October and December 2005.

A formal draft of the SPD was published in March 2006 for a six-week public consultation, as required under Regulation 17.

The remaining progress on the Waste Minimisation SPD occurred outside of the AMR monitoring period and will be reported upon in the next AMR covering the period 2006 - 2007.

3.2 Document Production against Milestones

The following production profiles set out the progress for each of the local development documents referred to in the proceeding paragraphs, against the timetable set out in the approved MWDS.

Production Profiles for Local Development Documents 2005 - 2006

Statement of Community Involvement (SCI)

Key Milestones	Target Dates	Completion Date	Target Achieved
Examination of SCI by Planning Inspectorate (PINS)	Sept 2005	Sept - Nov 2005	✓
Adoption of the SCI	Dec 2005	Dec 2005	✓

Key Milestone commentary:

Earlier milestones for the SCI were reviewed under the first AMR for 2004 / 2005. All of these milestones were successfully achieved on target. As the SCI has been formally adopted by the County Council during the second AMR monitoring period 2005 / 2006, it will not appear in future AMR reports.

Waste Minimisation in Development Projects SPD (WMSPD)

Key Milestones	Target Dates	Completion Date	Target Achieved
Commencement of SPD	June 2005	June 2005	✓
Draft SPD for Public Consultation	March 2006	Mar - June 2006	✓

Key Milestone commentary:

Following the 'Draft SPD' milestone, the document is timetabled to proceed to formal adoption by the County Council in September 2006. However, as this key milestone falls outside of the second AMR monitoring period 2005 / 2006, it will not be reported upon until the next AMR for 2006 - 2007.

Minerals Core Strategy (MCS)

Key Milestones	Target Dates	Completion Date	Target Achieved
Commencement of MCS	June 2005	June 2005	✓

Key Milestone commentary:

The future key milestones for the MCS are set out within the approved Minerals & Waste Development Scheme (MWDS). However, these milestones are timetabled to take place outside of the second AMR monitoring period 2005 / 2006 and will not be reported upon until the third AMR covering the period 2006 - 2007.

Waste Core Strategy (WCS)

Key Milestones	Target Dates	Completion Date	Target Achieved
Commencement of WCS	June 2005	June 2005	✓

Key Milestone commentary:

The future key milestones for the MCS are set out within the approved Minerals & Waste Development Scheme (MWDS). However, these milestones are timetabled to take place outside of the second AMR monitoring period 2005 / 2006 and will not be reported upon until the third AMR covering the period 2006 - 2007.

4 Minerals and Waste Local Plans Policy Monitoring

4.0 Introduction to Policy monitoring

The monitoring objectives in the AMR are based on the *'saved'* policies of the adopted Minerals and Waste Local Plans (MLP & WLP).

For each monitoring objective the relevant MLP and, or WLP policies and emerging sustainability objectives for the Core Strategies *(See Appendices G and H)* have been identified.

The sustainability appraisal (SA) objectives have been included in the AMR in order to provide a clear link between the current plan policies and the emerging policy objectives for the development plan documents of the MWDF.

In addition, each objective has been looked at and assessed against a series of Core Output Indicators (COIs), Local Output Indicators (LOIs), and where appropriate, policy targets.

These targets have been devised, based on the S.M.A.R.T approach, which aims to be; specific, measurable, achievable, realistic and time-bound. The targets are also to be used in a wider spatial context as provided in other local strategies and the emerging Regional Spatial Strategy (RSS).

In time, the S.M.A.R.T targets will be developed and expanded upon to inform as many of the monitoring objectives identified within the AMR as possible.

Finally, for considering the AMR objectives an accompanying section known as *Analysis and Interpretation* has been provided This part of the report highlights the headline monitoring results and provides a brief commentary to explain how and / or why the results have occurred.

AMR OBJECTIVE 1	To safeguard natural and historic environmental assets from the potential adverse impacts of minerals and waste developments
MONITORING OF MINERALS LOCAL PLAN POLICIES	**E1, E2, E3, E4, E5, E6, E7, E8, E9, E10, E11, E12**
MONITORING OF WASTE LOCAL PLAN POLICIES	**23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 43**
RELATED SA OBJECTIVES	**9,11,15**
CORE OUTPUT INDICATORS	**There are no Core Output Indicators for this AMR objective**
LOCAL OUTPUT INDICATORS	• No. of minerals and waste planning applications affecting natural environment and historic assets • Area (ha) of minerals and waste developments permitted upon designated assets • % of minerals and waste developments refused, where designated assets acted as one of the reasons for refusal

4.1 Summary of Natural and Environmental Assets in Gloucestershire

Gloucestershire has a total area of 270,454 ha of which almost 70% is covered by an environmental designation. The largest designation is that of Area of Outstanding Natural Beauty (AONB), which covers three areas in Gloucestershire and accounts for almost 51% of the county.

The county has over 900 sites designated locally or nationally for their nature conservation value. This includes 8 sites that are recognised as being of international importance as habitats for rare or vulnerable species (RAMSAR, SPA, & SAC sites). A much larger number of sites (over 20,000) are designated for their national and local historic interest. A list of designations and area coverage across Gloucestershire for 2005 / 2006 is provided in Table 7.

Table 7: Natural and Historic Environmental Designations in Gloucestershire in 2005 / 2006

Status of Designation	Title	No. of designated area	Area coverage in Gloucestershire (ha)
International	Special Area of Conservation (SAC)	6	1404
	Special Protection Area (SPA)	2	4660
	Ramsar Sites	2	4660

Table 7 (*cont*): Natural & Historic Environmental Designations in Gloucestershire in 2005 / 2006 *cont.*

Status of Designation	Title	No. of designated area	Area coverage in Gloucestershire (ha)
National	Area of Outstanding Natural Beauty (AONB)	3	136,400
	Sites of Special Scientific Interest (SSSI)	122	8883
	National Nature Reserves (NNR)	3	433
	Scheduled Ancient Monuments (SAM)	496	1537
	Registered Historic Parks, Gardens & Battlefields	101	6109
	Listed Buildings	12860	-
	Conservation Areas	264	6223
	Green Belt	1	7030
Regional / Local	Regionally Important Geological & Geomorphological Sites (RIGS)	147	-
	Local Nature Reserves (LNR)	10	240
	Locally Important Archaeological Sites	23920	4695
	Key County Wildlife Sites (KWS)	696	12845

4.1.1 Output Indicator Results

Data Collection

Data concerning natural and historic environmental assets is collected on an annual basis and covers the full AMR monitoring period for 2005 to 2006. Monitoring results for outputs can be found in LOI Tables 1 and 2.

LOI Table 1: Minerals & Waste planning proposals and environmental designations (2005 -2006)

Nature of Development	International, National and Local Designations							
	AONB		SSSI		Green Belt		KWS	
Decided Applications	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)
Minerals	3	0.19	0	-	1	2.25	1	0.04
Waste	2	0.4	0	-	0	-	-	-
Totals	*5*	*0.23*	*0*	-	*1*	*2.25*	*1*	*0.04*
Validated Applications								
Minerals	1	0.004	1	-	0	-	0	-
Waste	2	0.64	-	-	3	7.9	0	-
Totals	*3*	*0.68*	*1*	-	*3*	*7.9*	*0*	-
Overall Total	**8**	**1.23ha**	**1**	**- ha**	**4**	**10.15ha**	**1**	**0.04ha**

NOTE FOR LOI TABLE 1: *This table shows the relationship between minerals and waste proposals and various environmental designations. The area (ha) coverage in the table refers to the area of a proposal that falls within a particular designation. It does not identify the area of proposals outside of designations or take account of proposals affecting multiple designations.*

LOI Table 2: The impact of decided minerals & waste proposals upon environment designations			
Nature of Development	**Total no. of applications affecting natural & historic environmental assets**	**Number of applications affecting natural and historic environmental assets that;** *(Also as a % of the total no. of apps affecting environmental assets)*	
		Have been approved	**Have been refused as a result of impacting upon an environmental asset**
Minerals	7	5	0
Waste	7	2	0
TOTAL*	**14**	**7 *(50%)***	**0 *(0%)***

4.1.2 Analysis and Interpretation

During 2005-2006 a total of 14 minerals and waste applications, located within designated natural or historic assets were considered. Of these 7 proposals were decided and approved within the AMR monitoring period and none were refused on the basis of their impact upon a designation.

Based on the 14 proposals considered under the criteria of LOI Table 2, the most potentially impacted designation (by area) was that of the Green Belt. The second most potentially impacted designation (by area) was Areas of Outstanding Natural Beauty (AONBs).

As discussed in last year's AMR, this result appears to demonstrate a locational link between minerals and waste proposals and the affected designations. In the case of minerals proposals, Gloucestershire's AONBs are well known for their mineral resources *(i.e. crushed rock limestone),* whilst for waste proposals, the Green Belt designation appears to be an attractive location because of its close proximity to the County's key urban areas *(i.e. Gloucester and Cheltenham),* and due to the relative availability of land as a result of stricter planning controls for other competing forms of development *(e.g. housing, commercial premises, industry)*.

In addition, the Green Belt already accommodates significant waste management operations *(i.e. Grundons and Cory Environmental at Wingmoor Farm)* and has favourable geology *(i.e. significant deposits of clay minerals)* for larger land-take waste operations such as landfill and landraise.

AMR OBJECTIVE 2	To safeguard local communities, public amenity and health from the potential adverse impacts of minerals and waste developments
MONITORING OF MINERALS LOCAL PLAN POLICIES	**DC1, DC4, E17, E18, E19, E20, EM1, EM2, EM4, EM6**
MONITORING OF WASTE LOCAL PLAN POLICIES	**17, 37, 38, 39, 40, 41, 43, 44, 45**
RELATED SA OBJECTIVES	**4, 6, 9, 12**
CORE OUTPUT INDICATORS	**There are no Core Output Indicators for this AMR objective**
LOCAL OUTPUT INDICATORS	• The no. of approved minerals and waste developments that include public amenity and environmental health impact conditions for; Visual impacts; General pollution *(including smell, dust, noise, vibrations, odour, smoke, fumes, litter and vermin);* Water pollution *(including ground & surface water)* and Highway safety *(including site access)* • The percentage of minerals and waste developments refused, where public amenity and environmental health impacts acted as one of the reasons for refusal

4.2.1 Output Indicator Results

Data Collection

Data concerning amenity and public health conditions has been collected over an annual basis and covers the full AMR monitoring period for 2005 to 2006. Monitoring results for the output indicators can be found in LOI Tables 3 and 4.

LOI Table 3: Public health and amenity conditions imposed upon approved Minerals & Waste applications (2005 – 2006)

	Number of conditions imposed by amenity or public health issue *(and as a % of conditions used upon decided proposals)*				
Nature of Development	**Visual Impacts**	**General Pollution**	**Water Pollution**	**Highway Safety**	**Multiple Conditions**
Minerals *(Based on a total of 10 applications approved)*	4 (40%)	5 (50%)	5 (50%)	8 (80%)	7 (70%)

LOI Table 3 (cond.): Public health and amenity conditions imposed upon approved Minerals & Waste applications (2005 – 2006) *cont.*					
	Number of conditions imposed by amenity or public health issue *(and as a % of conditions used upon decided proposals)*				
Nature of Development	**Visual Impacts**	**General Pollution**	**Water Pollution**	**Highway Safety**	**Multiple Conditions**
Waste ***(Based on a total of 29 applications approved)***	15 (52%)	9 (31%)	11 (38%)	17 (58%)	16 (55%)
TOTALS FOR ALL APPROVED APPLICATIONS	**19 (49%)**	**14 (36%)**	**16 (41%)**	**25 (64%)**	**23 (59%)**

LOI Table 4: Number of applications refused on public health or amenity grounds	
Minerals *(Based on a total of 2 refused applications)*	**0**
Waste *(Based on a total of 1 refused application)*	**1**

4.2.2 Analysis and Interpretation

During the AMR period the most frequently applied conditions related to highway safety, followed by those relating to visual impacts, general pollution impacts and water pollution. Multiple use of conditions were also used for the majority of proposals. One application was refused on the basis of noise and traffic impacts on local communities.

These results reflect the scale and nature of minerals and waste operations present in the County, the sensitivity of local receptors and the dominance of transporting minerals and waste by road. As there was only one refusal reason based on public health and amenity grounds it is not possible to draw any general conclusions as to the significance of these issues on a countywide basis. Nevertheless, they are worth noting.

A further observation to take into account is the rural character of the County, which accommodates significant areas of important landscape designations (AONBs). This can prove to be a challenge for many minerals and waste developments, which can have an adverse impact on visual amenity. Consequently, conditions concerning the mitigation of visual impacts has been applied regularly on new planning proposals.

AMR OBJECTIVE 3	To ensure that appropriate reclamation, re-instatement and environmental enhancement schemes have taken place for worked-out and / or discontinued mineral and waste sites
MONITORING OF MINERALS LOCAL PLAN POLICIES	**R1, R2, R3, R4**
MONITORING OF WASTE LOCAL PLAN POLICIES	**42, 43**
RELATED SA OBJECTIVES	**11, 13**
CORE OUTPUT INDICATORS	**There are no Core Output Indicators for this AMR objective**
LOCAL OUTPUT INDICATORS	• The no. of minerals and waste proposals that include schemes for reclamation • The no. of minerals and waste proposals for which conditions relating to site restoration and aftercare have been imposed • The percentage of minerals and waste proposals that have been refused, where inadequate restoration and / or aftercare acted as one of the reasons for refusal. • The percentage of worked out and / or dis-continued minerals and waste sites that have been satisfactorily restored. • The percentage of enforcement complaints and enforcement actions, on worked out and/or discontinued minerals and waste sites, where there has been failure to carry out an approved reclamation and / or reinstatement scheme.

4.3.1 Output Indicator Results

Data Collection

Data concerning site reclamation has been collected over an annual basis and covers the full AMR monitoring period for 2005 to 2006. Monitoring results for the Local Output Indicators can be found in LOI Table 5. However, it is noted that there is no data available for the Local Output Indicators concerning the satisfactory restoration and the monitoring of reclamation and reinstatement schemes.

LOI Table 5: Approved Minerals and Waste Permissions with Reclamation of Aftercare Conditions (2005-2006)		
Nature of Development	**Proposals submitted with reclamation schemes**	**Restoration & aftercare conditions imposed**
Minerals	**2**	**8**
Waste	**4**	**4**

4.3.2 Analysis and Interpretation

LOI Table 5 demonstrate how minerals and waste proposals have a duty to consider sustainable after-use for sites that can facilitate increased environmental benefit or improved local amenity.

Reclamation was inherent in three of the six minerals and waste proposals, in that the restoration of land or previously excavated quarries formed part of the justification for the proposal.

For six of the proposals approved during 2005-2006 detailed reclamation and reinstatement schemes were included. Forestry and/or a return to agricultural land were the preferred after-uses in each. A further eight proposals included requirements for site restoration and after-care through the application of conditions to the planning consent.

No proposals were refused on the ground of an inadequate aftercare or restoration scheme.

The issue of implementation represents an ongoing monitoring challenge for the County Council. However, a new monitoring policy and service is shortly to be launched, which may assist in delivering improved baseline data for the AMR. It is anticipated that the service will also be able to assist with the final three Local Output Indicators for Objective 3, which are focused on the implementation of reclamation and/or reinstatement schemes.

AMR OBJECTIVE 4

To encourage the more efficient use of minerals and waste materials during development and re-development

MONITORING OF MINERALS LOCAL PLAN POLICIES	**n/a**
MONITORING OF WASTE LOCAL PLAN POLICIES	**36**
RELATED SA OBJECTIVES	**1, 5, 10, 14**
CORE OUTPUT INDICATORS	**There are no Core Output Indicators for this AMR objective**
LOCAL OUTPUT INDICATORS	• The number of *'major'* development & re-development proposals that include Waste Minimisation Statements • The percentage of 'major' development & re-development proposals refused, where Waste Minimisation issues acted as one of the reasons for refusal
TARGET	• **To achieve 100% submission of Waste Minimisation Statements for all *'major'* development and re-development applications in Gloucestershire by 2008**

4.4 'Major' Developments and Waste Minimisation

In order to support the development of the Waste Minimisation Supplementary Planning Document (SPD) *(see para 2.10.4)* the AMR monitoring regime has focused upon *'major'* development proposals submitted to both the County and District Councils. The thresholds applied for defining major developments are based upon DCLG's Best Value Performance Indicator (BVPI) 109a, which defines them as follows;

- ***Residential developments, which; comprise of 10 or more dwellings, or cover an area of more than 0.5Ha***
- ***Other types of development, which have a floorspace of more than 1000m^2,or cover an area of more than 1Ha***

4.4.1 Output Indicator Results

Data Collection

Data concerning waste minimisation has been collected over an annual basis from the District Council Development Control teams and covers a monitoring period from July 2005 to March 2006. The next AMR will provide a full set of data for the full monitoring period.

LOI Table 6: Major Applications & Waste Minimisation in Gloucestershire 2005				
District Council	**Total No.**	**Waste Min Statements Submitted**	**As a % of all major development received**	**No. refused on waste minimisation grounds**
Gloucester City	32	4*	12.5%	0
Tewkesbury	16	0	0	0
Cotswold	4	0	0	0
Stroud	12	0	0	0
Forest of Dean	16	0	0	0
Cheltenham	14	0	0	0
County total	**94**	**4**	**4.3%**	**0**

** Three Waste Minimisation Statements submitted to Gloucester City relate to the various phases of development at the Quedelegy Urban Village Development.*

4.4.2 Analysis and Interpretation

To date very few Waste Minimisation Statements have been submitted across the County for major developments. Three of the four developments listed above relate to the Quedgeley Urban Village *(now known as Kingsway)*. The original outline application for this development involved significant input from the County Council Minerals and Waste Policy team on related matters and as such provided an ideal opportunity to implement the waste minimisation policy of the Waste Local Plan *(Policy 36)*.

The low level of waste min. statements observed from 2005-06 can be attributed to the emergence of the Waste Minimisation SPD during the AMR monitoring period. Its formal stages of production occurred exclusively during the AMR period.

However, it is anticipated that future AMRs will demonstrate a significant increase in the use of Waste Minimisation Statements as the publication and formal adoption of the SPD (Sept 06) has both stimulated interest within the construction industry and raised the profile of the issue for Development Control teams across the County. Consequently, the existing AMR target of 100% waste minimisation submissions by 2008 will remain in place.

AMR OBJECTIVE 5

To safeguard existing and future minerals and waste resources from non-minerals developments

MONITORING OF MINERALS LOCAL PLAN POLICIES	**SE3, E21**
MONITORING OF WASTE LOCAL PLAN POLICIES	**7**
RELATED SA OBJECTIVES	**3, 5, 7**
CORE OUTPUT INDICATORS	**There are no Core Output Indicators for this AMR objective**
LOCAL OUTPUT INDICATORS	• The no. of planning applications for non-minerals and waste developments submitted upon sites occupied by existing mineral sites or waste management facilities and preferred areas and sites as identified within the MLP and WLP • The percentage of non-minerals and waste developments refused, where safeguarding minerals and waste resources acted as one of the reasons for refusal. • The percentage of planning applications for non-minerals and waste developments received within the Mineral Consultation Area (MCA), which required a safeguarding consultation. • The percentage of non-minerals and waste developments received within the Mineral Consultation Area (MCA) refused, where safeguarding minerals resources acted as one of the reasons for refusal.

5.1.1 Output Indicator Results

Data Collection

The first AMR covering the period 2004 and 2005 highlighted the lack of available data concerning the relationship between non-minerals and waste developments, the safeguarding of minerals and waste sites and the implementation of the County's Minerals Consultation Area (MCA).

Whilst it has not been possible to fully resolve the lack of data for the AMR 2005 and 2006, some progress has been made in relation to developments that have been submitted within the County's MCA.

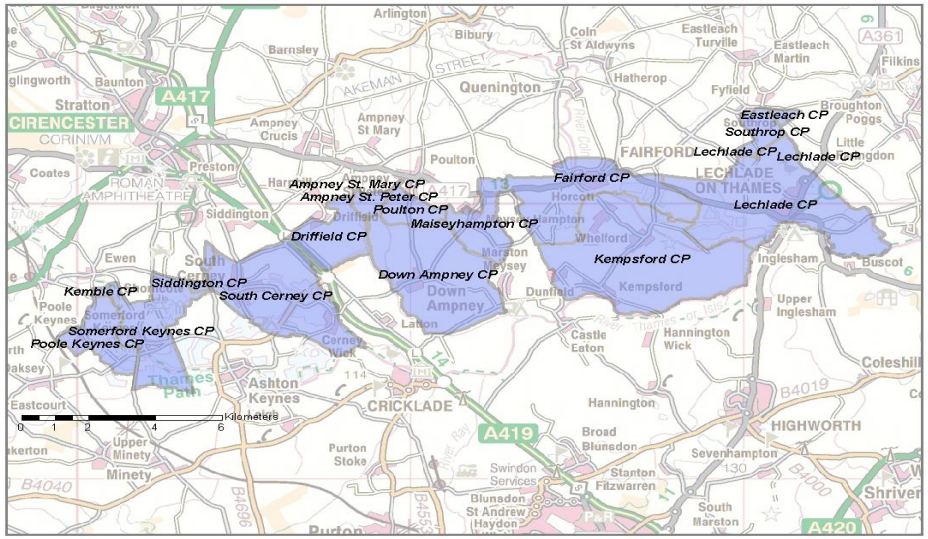
Through liaison between the County and Cotswold District, it has been possible to establish the number of applications that have been permitted within or partly within the MCA. Table LOI 7 sets out the full list of applications divided by the parish area that they are located within.

LOI Table 7: Summary of Non-Minerals Developments in MCA			
Parish Councils	**Total No of Developments**	**Developments refused on M&W Grounds**	**Developments that received a Safeguarding Consultation**
Ampney St Peter	6	0	0
Down Ampney	12	0	0
Ampney St Mary	7	0	0
Driffield	7	0	0
Eastleach	9	0	0
Fairford	34	0	0
Kemble	13	0	0
Kempsford	24	0	0
Meysey Hampton	9	0	0
Poole Keynes	5	0	0
Poulton	20	0	0
Siddington	14	0	0
Somerford Keynes	36	0	0
South Cerney	46	0	0
Southrop	9	0	0
Total	**251**	**0**	**0**

4.5.2 Analysis and Interpretation

The character of Gloucestershire's Mineral Consultation Area (MCA) is predominantly rural with a small number of settlements and an emerging tourism and recreation industry associated with worked out mineral sites.

Map of the Mineral Consultation Area (MCA) and local Parish Councils



Consequently it is unsurprising that new development proposals have not been subject to advice from the Minerals Planning Authority (MPA) regarding possible mineral safeguarding or sterilisation issues.

This is likely due to the majority of developments being either small-scale and residential in nature (*i.e. extensions and /or alternations to existing dwellings, infill development, highway access, etc)*, or linked to the after-use proposals for previous worked-out mineral sites *(i.e. boating lakes, country parks, holiday lodges, etc).* As mineral working has been completed prior to these developments there is perceived to be no safeguarding or sterilisation issue to consider.

However, concern is raised as to absence of any mineral consultations for development proposals during the AMR period, or the presence of a clear protocol or policy for when such consultations should be carried out. It is therefore proposed that continued liaison should be carried out with the District Council in order to expand upon the present monitoring system so as to include more formal consultations on development proposals. Criteria for such an exercise will need to be agreed between the authorities as soon as possible for next year's AMR.

AMR OBJECTIVE 6	To ensure the consistent and appropriate landbank provision and supply of aggregates in line with the regional guidelines set out in MPG 6
MONITORING OF MINERALS LOCAL PLAN POLICIES	**A1, A2, A3, A4, A5, A6, A7**
MONITORING OF WASTE LOCAL PLAN POLICIES	**n/a**
RELATED SA OBJECTIVES	**3, 7**
CORE OUTPUT INDICATORS	• Annual production of primary land won aggregates • Annual production of secondary / recycled aggregates *(see discussion under section 4.6.1)*
LOCAL OUTPUT INDICATORS	• Aggregate landbank for Gloucestershire as of 31st December 2004 • Applications submitted upon Preferred Areas of mineral extraction, as set out in the MLP
TARGETS	• **Make provision for the regional apportionment guidelines of 19.4mt of Sand & Gravel and 47.6mt of Crushed Rock Limestone between the guideline period 1992 and 2006** • **Make provision for a landbank of aggregate reserves throughout and at the end of the plan period of at least 7 years for Sand & Gravel and Crushed Rock Limestone**

4.6.1 Output Indicator Results

Data Collection

Data concerning aggregate production has historically been collected by MPAs on a calendar year basis from 1st January to the 31st December. Consequently the data presented in AMR monitoring reports will reflect the previous year's figures. However, for this AMR, aggregate production data is provided for the two years; 2004 and 2005. This is due to delays that occurred in the collection of data during 2004, resulting from the implementation of the Freedom of Information (FOI) Act 2000.

As with the first AMR cover the period 2004 to 2005, there is no up-to-date published data available for secondary and recycled aggregate production. This due to technical difficulties in collecting such data at source. Recycled aggregates are often directly re-used on-site in development projects and are never recorded. Whilst limited information is collected on mobile crushing plant, this is as yet not disseminated from general waste data by the regulatory body, the EA..

In the case of secondary aggregate production this often exempt from the current EA licensing and monitoring regimes. Although current opportunities for production is negligible.

COI Table 1: Annual production of aggregates for 2004 and 2005 *(in Million tonnes)*		
Aggregate Mineral	**Annual Production in 2004**	**Annual Production in 2005**
Crushed Rock Limestone	**1.91 Mt**	**1.95 Mt**
Sand & Gravel	**0.84 Mt**	**1.03 Mt**

LOI Table 8a: Estimated Aggregate Landbank as of 31/12/ 04 and 31/12/05 *(in million tonnes)*		
Aggregate Mineral	**Estimated Landbank 2004**	**Estimated Landbank 2005**
Crushed Rock Limestone	**26.22 Mt**	**28.85 Mt** ***(32.60Mt)~***
Sand & Gravel	**8.50 Mt**	**7.83 Mt**

~ - The main figure does not include a total of 3.75 Mt calculated as Dormant' Reserves, which as advised by DCLG should not be included in the published landbank totals from 2005 onwards.

LOI Table 8b: Estimated Remaining years* of Aggregate Landbank as of 31/12/04 and 31/12/05		
Aggregate Mineral	**Estimated Remaining Years***	**Estimated Remaining Years***
Crushed Rock Limestone	**8.27 years**	**11.82 years**
Sand & Gravel	**6.59 years**	**6.07 years**

** - This figure is based on providing for the annual expression of the local apportionment of the regional guidelines 1992 to 2006. For crushed rock limestone this represents 3.17 million tonnes per annum and for sand & gravel 1.29 million tonnes per annum.*

LOI Table 9: Minerals Proposals and Preferred Areas for Mineral Extraction during 2005 / 2006				
Aggregate Mineral	**Total No. of Proposals Submitted / Determined**	**No. of Proposal upon Preferred Areas**	**No. of Proposals Approved**	**No. of Proposal Refused**
Crushed Rock Limestone	**6**	**3**	**5**	**0**
Sand & Gravel	**3**	**2**	**1**	**0**

Nevertheless, the County Council is committed to improving secondary and recycled aggregate data and supports the work being pursed by the South West Regional Assembly (SWRA) and regional liaison team at the EA. This work is based on the technical assessment work commissioned by the SWRA and carried out by Capita Symons in 2005. This project advised that Gloucestershire has a recycled / secondary aggregate capacity of 470,000 tonnes per year as at 2005.

4.6.2 Analysis and Interpretation

In 2004, 1.91 million tonnes of crushed rock limestone and 0.84 million tonnes of sand & gravel were produced from mineral operations in Gloucestershire. Over the following year (2005) production increased by 40,000 tonnes for crushed rock limestone *(to 1.95 million tonnes)* and 190,000 tonnes for sand & gravel *(to 1.03 million tonnes)*.

In terms of the estimated aggregate landbank of permitted reserves, as of 31st Dec 2004, a total of 26.22 million tonnes of crushed rock and 8.50 million tonnes of sand & gravel remained. From 31st Dec 2005, the estimated permitted reserves for crushed rock increased to 28.85 million tonnes and for sand & gravel reduced by 670,000 tonnes to 7.83 million tonnes.

The change in the aggregate landbank for crushed rock are a result of a significant crushed rock limestone permission and changes in the measurement of the landbank. From 2005 DCLG has advised that landbank calculations should not include reserves from 'dormant' sites. In Gloucestershire this affects around 3.75 million tonnes of crushed rock aggregate that has been removed from the landbank.

It is also important to note that there is a difference in estimated reserves against the annual production figures, in that the reserve totals do not reduce by the equivalent amount each year This is due to the annual re-calculation of estimated reserves by operators and new permissions being included in the reserve totals.

In terms of the first AMR target set out on the previous page, annual production in Gloucestershire appears to be below the forecast provision for crushed rock and sand and gravel to meet the local apportionment of the regional guidelines for 1992 to 2006. Based on the annual expression of the local apportionment for Gloucestershire *(3.17 mtpa of crushed rock and 1.29 mtpa of sand & gravel)*, annual aggregate production for 2004 represents a provision shortfall equal to 1.26 million tonnes for crushed rock and 0.45 million tonnes for sand & gravel.

For 2005, the crushed rock shortfall figure reduced to 1.22 million tonnes and for sand & gravel reduced to 0.26 million tonnes.

The second AMR target is concerned with maintaining a landbank of permitted reserves of at least 7 years. For Gloucestershire's landbank of crushed rock as of 31st December 2005, there is sufficient provision for a further 4.82 years beyond the maintenance of the seven year landbank. However, for sand & gravel there is a provisional shortfall of 0.93 years, which would suggest that a new permission or permissions will need to be granted in order to maintain a seven year landbank.

Please note that unlike other AMR targets, those for objective 6 relate to provisional need and potential consequences for future policy decisions. They do not represent performance targets for which the planning authority has any direct control over.

Nevertheless, the overall commentary regarding meeting or failing to meet, these provisional targets should form part of the evidence base for emerging local minerals development plan documents and should act as a material consideration as part of future development control decisions.

It is also important to note that the data provided for 2005 forms part of a wider national survey for aggregates known as the Aggregate Survey 2005 (AM2005). Although data collection for the survey is carried out at the local level by minerals planning authorities and is reflected in this AMR, the overall data management is carried out by British Geological Survey (BGS) in conjunction with the secretaries of the Regional Aggregate Working Parties (RAWPs). Consequently, the sales and reserves data for 2005 may be subject to change.

AMR OBJECTIVE 7

To facilitate the continued and sustainable supply of locally required building stone materials

MONITORING OF MINERALS LOCAL PLAN POLICIES	**NE2**
MONITORING OF WASTE LOCAL PLAN POLICIES	**n/a**
RELATED SA OBJECTIVES	**2, 3, 7, 9**
CORE OUTPUT INDICATORS	**There are no Core Output Indicators for this AMR objective**
LOCAL OUTPUT INDICATORS	• Annual supply of natural building stone • Non-aggregate landbank for Gloucestershire as of 31st December 2004

4.7.1 Output Indicator Results

Data Collection

Data concerning non-aggregate mineral production has historically been collected by MPAs on a calendar year basis from 1st January to the 31st December. Consequently the data presented in AMR monitoring reports will reflect the previous year's figures. However, for this AMR period, non-aggregate production data is taken for the calendar year of 2004 to reflect the missing data from the previous year's survey. Unfortunately due to the completion of the Aggregate Minerals Survey 2005, data for non-aggregate limestone has not been completed at the time of publication of this AMR.

The annual mineral survey has traditionally been quite comprehensive in establishing the end-uses of non-aggregate mineral in Gloucestershire. However, it is extremely difficult for operators to accurately distinguish between the overall potential reserves of non-aggregate and their eventual end-use. Consequently, data presented in the AMR for non-aggregate mineral reserves is as a single figure, which is derived from a single return from each surveyed site.

LOI Table 10: Annual production of building stone in Gloucestershire for 2004			
Mineral Resource Area	**Mineral type**	**Annual Production for 2004** *(in tonnes)*	**As a % of total building stone produced**
Cotswolds	Limestone	103,762 t	78.86 %
Forest of Dean	Limestone	19,930 t	15.15%
	Sandstone	7,880 t	5.99%
Total	**-**	**131,572 t**	**-**

LOI Table 11a: Estimated Remaining years of Non-aggregate Landbank as of 31st December 2004			
Physiographic Areas	**Non-aggregate Mineral**	**Estimated Landbank *(including for agricultural uses)***	**As a % of the total landbank**
Cotswolds	Limestone	2.83 million tonnes	63.17 %
Forest of Dean	Limestone	1.08 million tonnes	24.51 %
	Sandstone	0.5 million tonnes	11.34 %
Total	**-**	**4.41 million tonnes**	-

LOI Table 11b: Estimated Remaining years* of Aggregate Landbank as of 31st December 2004	
Non-aggregate Mineral	**Estimated Remaining Years***
Limestone	**32.6 years**
Sandstone	**35.7 years**

** - This figure is based on a subdivision of the average production of non-aggregate minerals over the previous 5 years against the remaining landbank of permitted reserves. It provides only a rough indication of how long the remaining landbank will be able to provide non-aggregate minerals.*

4.7.2 Analysis and Interpretation

During 2004 a total of 131,572 tonnes of non-aggregate minerals was produced for use as building stone. A significant proportion (94%) was derived from limestone from the Cotswolds and Forest of Dean resource areas. Whilst the remaining material (6%) was sourced from Sandstone from the Forest of Dean area.

The landbank of permitted reserves as of the 31st December 2004 stood at 4.41 million tonnes of all non-aggregate limestone and sandstone in Gloucestershire. Close to 88% of the remaining landbank amounted to limestone reserves and nearly 12% to sandstone reserves.

In terms of the remaining length of the landbank, Gloucestershire initially appears to have sufficient reserves for at least the next 30 years, based on current levels of production. However, it is important to stress that these figures do not reflect the complexity demonstrated in the end-uses of the non-aggregate limestone and sandstone.

A key use of non-aggregate limestone and sandstone is as a building stone. The viability of this material is heavily dependant upon relative strength, size, colour, and texture. Consequently, whilst overall remaining reserves of material across the County may indicate that a significant amount of mineral is available, not all of it will be suitable for certain building stone purposes and projects. A more detailed assessment will need to be carried out to determine current levels of provision for certain stone types *(e.g. Tetbury stone, Guiting stone, etc..)* and particular end-uses *(e.g. walling, tiling, dimension stone etc.).*

AMR OBJECTIVE 8

To facilitate the continued and sustainable supply of clay minerals

MONITORING OF MINERALS LOCAL PLAN POLICIES	**NE1**
MONITORING OF WASTE LOCAL PLAN POLICIES	**n/a**
RELATED SA OBJECTIVES	**3, 7**
CORE OUTPUT INDICATORS	**There are no Core Output Indicators for this AMR objective**
LOCAL OUTPUT INDICATORS	• Annual supply of clay • Clay landbank for Gloucestershire as of 31st December 2004

4.8.1 Output Indicator Results

Data Collection

Data concerning clay mineral production has historically been collected by MPAs on a calendar year basis from 1st January to the 31st December. Consequently the data presented in AMR monitoring reports should reflect the previous year's figures. However, for this AMR covering the period 2005 and 2006, non-aggregate production data is taken for the calendar year of 2004 to reflect the missing data for last years report and the delayed collation of the full minerals survey for 2005.

LOI Table 12: Annual Production of Clay in Gloucestershire in 2004
Annual Production for 2004 *(in tonnes)*
70,000 t

LOI Table 13: Estimated Clay Landbank as of 31st December 2004	
Estimated Landbank *(In million tonnes)*	**Estimated Remaining Years***
1 mt	**14.3 years**

4.8.2 Analysis and Interpretation

As of 2004, clay extraction in Gloucestershire for brick-making and other engineering purposes amounted to 70,000 tonnes. This material was extracted from the three established brickworks in the County (see Appendix C). During 2004, clay extraction contributed to the County brick-making industry, which produced close to 17 million bricks.

Unfortunately, there is no data available to confirm how significant local clay extraction was to brick manufacturing in 2004, as brick-making can involve a significant degree of processing and manufacturing. This may include the blending of multiple clay types that are imported from different areas across the country. It is likely that further investigation into the County's brick-making industry will be needed in order to establish the significance of importation into Gloucestershire.

In addition it is important to note that brick-making is not the only use for extracted clay in Gloucestershire. A number of waste disposal operations, such as landfills and landraises, use clay as lining material. There is currently no data available as to the annual tonnage of local clay used in this process, as the vast majority is derived from on-site sources and is not imported.

AMR OBJECTIVE 9

To ensure all new waste management facilities make a positive contribution towards developing an integrated and sustainable waste management system

MONITORING OF MINERALS LOCAL PLAN POLICIES	**n/a**
MONITORING OF WASTE LOCAL PLAN POLICIES	**1, 2, 3, 6**
RELATED SA OBJECTIVES	**1, 10, 11, 14**
CORE OUTPUT INDICATORS	• The annual capacity of waste management facilities by waste type
LOCAL OUTPUT INDICATORS	• The number of new waste management facilities by management type* • The distribution of waste management facilities by district authority • The percentage of waste arisings (inputs) from within and from outside of the South West region • The percentages of waste by destination following management (outputs) for within and for outside of the S.West region • The number of new waste management facilities that are operational within the higher tiers of the waste hierarchy
TARGETS	• **Ensure the provisional capacity to handle (i.e. recycle, reuse and / or recover) 83% of all managed Commercial and Industrial waste* in Gloucestershire by 2020 (*In accordance with RWMS policies P7.4 and P7.5)*** • **Ensure the provisional capacity to handle (i.e. recycle, reuse and / or recover) 180,000 tpa of all managed Inert* and Construction and Demolition waste* in Gloucestershire by 2020 *(In accordance with RWMS appendix C, Table 3 - Page 78)*** • **Ensure the provisional capacity for the landfilling* of 380,000 Tpa of waste in Gloucestershire by 2020 *(of which 180,00 Tpa is to be bio-degradable and 210,00 Tpa is to be inert) (Subject to the provisions of the LATS Scheme)***

*- The definition of these waste types is provided in **Appendix F**

4.9.1 Output Indicator Results

Data Collection

Data concerning waste sites and waste management facility capacity is collected by the County Council through their register of planning consents and by the Environment Agency through their waste management licensing regime.

It is important to note that the waste management capacity for a site may differ between the planning consent granted by the County Council and the waste management licence issued by the Environment Agency. Where this is the case, the lower capacity figure from the licence or planning consent will act as the operational capacity for the AMR.

To ensure a consistent monitoring approach through the AMR, a series of generic waste categories has been applied to the calculation of waste sites and facility capacity data. These categories are defined in Appendix F of the AMR.

COI Table 2a: Waste Management Facility Capacity (MSW) for Gloucestershire
(in ,000 tonnes per annum)

Waste Category	Year of Data	Method of Waste Management				
		Composted	Recycled	Treated	Recovered	Disposed (Landfill)
Municipal Solid Waste (MSW)	2006	**50**	**121***	**0**	-	**10,500**

** - This includes 30,000 tonnes derived from a MRF which has not been classified in the WCS as a HRC or WTS.*

COI Table 2b: Waste Management Facility Capacity (C&I) for Gloucestershire
(in ,000 tonnes per annum)

Waste Category	Year of Data	Method of Waste Management			
		Composted	Recycled	Treated / Recovered	Disposed (Landfill)
Commercial & Industrial Waste (C&I) *excluding metals*	2006	**4**	**68**	**120**	**10,500**

COI Table 2c: Waste Management Facility Capacity (C&D) for Gloucestershire
(in ,000 tonnes per annum)

Waste Category	Year of Data	Method of Waste Management		
		Recycled / Treated	Transferred	Disposed (Landfill)
Construction & Demolition Waste (C&D)	2006	**249**	**332**	**10,500**

LOI Table 14: Distribution of waste management facilities by District (excluding STW)

District	Base Year of 2003	New facilities permitted during 04- 05	New facilities permitted during 05- 06
Cheltenham BC	3	0	0
Cotswold BC	12	0	0
Forest of Dean DC	21	0	4
Gloucester City	17	1	1
Stroud DC	20	0	1
Tewkesbury BC	16	2	1
Total	**89**	**3**	**7**

LOI Table 15: Waste management system for Gloucestershire in relation to the processes of the Waste Hierarchy

The Waste Hierarchy	Waste Management operations in Gloucestershire as of 2006
Reduction	0
Re-use	7
Recovery	90
Disposal	28

4.9.2 Analysis and Interpretation

As of March 2006 the capacity of facilities to manage MSW in Gloucestershire equated to a maximum of 50,000 tonnes per annum for composting; 91,000 tonnes per annum for recycling; and 10.5 million tonnes per annum for disposal to landfill.

Over the same period the capacity for managing Commercial and Industrial (C&I) waste in Gloucestershire, excluding metals amounted to a maximum of 4,000 tonnes per annum for composting; 68,000 tonnes per annum for recycling and/or reuse; 120,000 tonnes per annum for transferring and treatment; and 10.5 million tonnes per annum for disposal to landfill.

The maximum capacity for managing construction and demolition (C&D) waste in Gloucestershire as at March 2006, equalled 249,000 tonnes per annum for recycling and treatment; 332,000 tonnes per annum for transfer; and 10.5 million tonnes per annum for disposal to landfill.

In terms of landfill capacity, it is important to note that this figures is derived from a conversion factor of 1 tonnes / m^3 . It is also based on a theoretical landfill void-space that covers all waste streams in Gloucestershire and does not provide an exclusive landfill potential for each stream.

In summary, Gloucestershire's waste management system provides capacity for a range of waste management options that include; composting, transfer, recycling, treatment and disposal to landfill.

The data in COI tables 2a, 2b and 2c are currently under discussion with the Environment Agency as part of the ongoing consultation on the issues and options Waste Core Strategy. Consequently this data may be subject to change in future AMR reports.

Understanding the current waste capacities for the County will prove vital in developing the future spatial strategy for waste through the emerging Waste Core Strategy (WCS). It will enable the Council to establish whether there are any *'gaps'* in waste provision in terms of meeting the regionally apportioned waste management figures set out in the Regional Waste Strategy (RWS) and emerging Regional Spatial Strategy (RSS). The apportioned figures are set out earlier in this AMR under Table 2.

The base year for the distribution of waste management facilities across Gloucestershire is 2003. Excluding the extensive, closed network of sewage treatment works (STW) and pumping stations, a total of 89 waste management facilities were located in Gloucestershire during that year. During the first AMR monitoring period of 2004 to 2005, the number of '*new'* facilities that were permitted equalled 3. For the following AMR monitoring period of 2005 and 2006, this figure increased by a further 7 *'new'* facilities. The largest number of *'new'* permitted facilities by district during the two AMR periods, was 4 in the Forest of Dean.

The data provided highlights the number of *'new'* waste management facilities by district that have been permitted in Gloucestershire between 2004-05 and 2005-6. It does not indicate whether these sites are now operational or whether existing facilities in the County have closed. Information relating to these matters can only be extrapolated from waste data returns provided by the Environment Agency, which at present is not up-to-date beyond the 2003 base year.

AMR OBJECTIVE 10

To facilitate the development of a strategic and local network of waste management facilities in line with the provision identified in the WLP

MONITORING OF MINERALS LOCAL PLAN POLICIES	**n/a**
MONITORING OF WASTE LOCAL PLAN POLICIES	**4, 5**
RELATED SEA OBJECTIVES	**1, 3, 6, 14**
CORE OUTPUT INDICATORS	**There are no Core Output Indicators for this AMR objective**
LOCAL OUTPUT INDICATORS	• Detailed information concerning waste planning proposals submitted and / or determined upon preferred sites / areas of search for future waste management as defined within the WLP • The number and percentage of all waste planning proposals submitted and / or determined on preferred sites / areas of search identified within the WLP

4.10.1 Output Indicator Results

Data Collection

Data concerning waste planning proposals and waste site allocations within the Waste Local Plan (WLP) is collected by the County Council through their register of planning consents. All data collected relates to the AMR 2005 - 2006 period.

LOI Table 16 sets out detailed information on both submitted and decided proposals for waste management, which have been submitted upon waste site allocations within the WLP. It indicates the type of proposal; total site area; area coverage within the WLP allocation; and the decision status.

LOI Table 16: Waste proposals upon preferred sites allocated within the WLP as of 2005-06

Proposal	Proposal Area	% coverage of preferred area	Decision	Planning Constraints
Waste Transfer Station (WTS) dealing with Municipal Solid Waste (MSW)	1.04 ha	0.73% of WLP Site 3	Approved	Certificate of Lawfulness - *no specific conditions imposed*
Household Recycling Centre (HRC)	1.47 ha	1.03% of WLP Site 3	Approved	15,000 tpa of MSW only Restricted hours of opening

LOI Table 16: Waste proposals upon preferred sites allocated within the WLP as of 2005-06 *cont.*				
Proposal	**Proposal Area**	**% coverage of preferred area**	**Decision**	**Planning Constraints**
Erection of a reception shed at an existing Waste Transfer Station (WTS)	0.1 ha	5.00% of WLP Site 19	Approved	No new restrictions to that of the existing WTS
Temporary storage of End-of-Life fridges and freezers	0.25 ha	0.51% of WLP Site 2	Approved	Restricted hours of operation Restricted stockpile heights
Erection of Materials Recovery Facility (MRF) and ancillary development including office and weighbridge	2.64 ha	11.84% of WLP Site 17	Undecided as of 31/03/2006	-
Total	**5.5 ha**	**2.56% of all WLP sites affected**	-	-

LOI Table 17: Waste applications and preferred sites allocated within the WLP as of 2005-06			
Total number of waste applications for 2005-06 *(submitted / determined)*	**Number and (%) of waste proposals upon: -**		
	WLP Preferred Sites	**Existing sites for waste mgmt**	***'New'* sites for waste mgmt, not allocated in the WLP**
45	7 (16%)	28 (62.2%)	8 (17.7%)

4.10.2 Analysis and Interpretation

A total of 2.86ha of land allocated for waste management within the WLP was permitted for new waste operations in 2005-06. This represented 2.56% of the total area afforded to the specific allocated preferred areas during the year.

In terms of waste applications and preferred areas allocated within the WLP, 45 applications were considered during 2005-06. Of these, 7 were located upon preferred areas; 28 were located upon existing waste management sites; and 8 represented *'new'* facilities, with no previous history of waste management.

It is important to note that the majority of proposals for waste management in 2005-06 related to extensions to, or revisions to the operation of existing facilities. This is clearly evident in the volume of waste proposals that were considered upon existing waste management sites.

In respect of proposals upon preferred sites in the WLP, it is also important to appreciate that the relatively low number of proposals and associated land-take is likely to reflect the longer-term site strategy within the WLP and the present trend in facilities for waste management.

Site allocations within the WLP have been planned to ensure sufficient provision will be made for a mix of different waste facilities over the full plan period, rather than to meet short-term needs. A number of allocations include the prospect for future landfilling, which can represent a significant proportion of the overall land-take. Consequently, any assessment of annual land-take figures must take not be seen in isolation and should take into account each sites' potential for future landfilling proposals.

In the context of the county's developing waste management system, the present trend for new waste proposals is for facilities that seek to move waste up the waste hierarchy. In the majority of cases these facilities have a smaller physical footprint than more traditional waste developments *(e.g. landfill sites)* and are often housed within former industrial buildings or sites. These facilities can often take on the character similar to that of light industrial / business uses.

In conclusion, it is unwise to make future policy assumptions over the county's WLP preferred areas based on the number of proposal considered and land-take. A more comprehensive review that includes type and capacity of facilities will prove necessary.

AMR OBJECTIVE 11	To facilitate the development of a range of waste management facilities that will contribute towards an integrated waste management system
MONITORING OF MINERALS LOCAL PLAN POLICIES	n/a
MONITORING OF WASTE LOCAL PLAN POLICIES	6, 8, 9, 10, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22
RELATED SA OBJECTIVES	1, 3, 6, 14
CORE OUTPUT INDICATORS	• Amount of municipal waste arising, and managed by management type, and the percentage each management type represents of the waste managed
LOCAL OUTPUT INDICATORS	• Total amount of waste managed in Gloucestershire, and as a breakdown by waste type • The amount of waste managed in Gloucestershire by management method

4.11.1 Output Indicator Results

Data Collection

Data concerning managed waste is provided by the Environment Agency through their waste management licensing regime and for municipal waste from within GCC in its capacity as the Waste Disposal Authority (WDA).

For construction & demolition (C&D) and commercial & industrial (C&I) wastes the most up-to-date data available is for 2002 - 03, whilst for municipal waste data is available for 2005 - 06.

COI Table 3 and LOI Tables 17, 18 and 19 set out the headline figures for managed waste in Gloucestershire.

COI Table 3: Municipal Solid Waste managed in Gloucestershire 2004-06		
Waste management method	**Amount of MSW managed** *(in tonnes)* **and % of total MSW managed by management method**	
	2004 / 2005	**2005 / 2006**
Composted	22,774 tonnes	32,265 tonnes
As a % of annual MSW managed	7.4%	10.3%
Recycled	58,308 tonnes	66,381 tonnes
As a % of annual MSW managed	18.8%	21.3%
Disposed of to Landfill	228,321 tonnes	213,255 tonnes
As a % of annual MSW managed	73.8%	68.5%
Total	**309,403 tonnes**	**311,901 tonnes**

LOI Table 18: Managed Waste in Gloucestershire *(in tonnes)*		
Waste Stream	**Base Year**	**Total**
Municipal Solid Waste (MSW)	2005 / 2006	311,901 tonnes
Commercial & Industrial (C&I) *including metals*	2002 / 2003	610,000 tonnes
Construction & Demolition (C&D)	2002 / 2003	424,000 tonnes

4.11.2 Analysis and Interpretation

In 2005-06 Gloucestershire managed 311,901 tonnes of Municipal Solid Waste (MSW). Of this total, the majority (68.5%) was disposed of to landfill. The remaining 98,646 tonnes (31.6%) was composted or recycled. In terms of the waste management trends, there has been an increase in the proportion of MSW being diverted from landfill between 2004-05 to 2005-06. During the same period the proportion of MSW sent to landfill has reduced by over 5% of the total annual MSW managed.

No further data has been provided by the Environment Agency for the current AMR period in respect of C&I and C&D waste streams. However, the data set out in this AMR has been revised from previous publications to reflect clarifications by the County Council and Environment Agency.

Appendix A: Minerals Sites Gloucestershire

QUATERNARY DRIFT DEPOSITS – 'Sand & Gravel' Aggregate

QUARRY NAME	OPERATOR / OWNER	LOCATION *(Grid Reference)*	OPERATING STATUS	DISTRICT AREA
BISHOPS CLEEVE	Huntsmans Quarries Ltd	394600, 227200	Active	Tewksbury
BROMSBERROW (NORTH)	Allstones Trading Co. Ltd	373855, 233050	Active	Forest of Dean
CERNEY WICK	Hills Minerals & Waste Ltd	407650, 195300	Inactive	Cotswold
COTSWOLD COMMUNITY	Hills Minerals & Waste Ltd	403160, 196210	Active	Cotswold/North Wiltshire
HORCOTT PIT	Hansons Aggregates	414750, 199680	Active	Cotswold
MANOR FARM	Aggregate Industries UK Ltd	417105, 197650	Active	Cotswold
NETHERHILLS	Moreton C. Cullimore (Gravels) ltd	376500, 206800	Active	Stroud
OAKTREE FIELDS	Hills Minerals & Waste Ltd	406460, 195795	Inactive	Cotswold
SHORNCOTE	Hills Minerals & Waste Ltd	403070, 196885	Active	Cotswold
SHOWBOROUGH COMMON	Unknown	390790, 238400	Inactive	Tewkesbury
SPATSGATE LANE	Glos. Sand & Gravel Co.	402395, 195830	Active	Cotswold
STUBBS FARM	Earthline Ltd	416700, 196825	Active	Cotswold
THORNHILL FARM	Hanson Aggregates	418120, 199280	Active	Cotswold

JURASSIC LIMESTONES – 'Crushed Rock' Aggregate & Non-aggregate uses

QUARRY NAME	OPERATOR / OWNER	LOCATION *(Grid Reference)*	OPERATING STATUS	DISTRICT AREA
BROCKHILL	Cotswold Stone Quarries	413520, 223835	Active	Cotswold
SHORNCOTE	Hills Minerals & Waste Ltd	403160, 196210	Active	Cotswold
COTSWOLD HILL	Cotswold Hill Stone & Masonry Ltd	408180, 229150	Active	Cotswold
DAGLINGWORTH	Hanson Aggregates	400050, 206160	Active	Cotswold
FARMINGTON	Farmington Natural Stone	413200, 216840	Active	Cotswold
GRANGE HILL	The Natural Stone Market	411490, 224420	Active	Cotswold
GUITING	Hanson Aggregates	407950, 217900	Active	Cotswold
HORNSLEASOW	Huntsmans Quarries Ltd	413145, 232250	Inactive	Cotswold
HUNTSMANS	Huntsmans Quarries Ltd	411910, 225445	Active	Cotswold
OATHILL	Corpus Christi College	410260, 228920	Active	Cotswold
OXLEAZE FARM	Cotswold Building Stone Ltd	405640, 222620	Active	Tewkesbury
PARK FARM (AMPNEY CRUCIS)	Cotswold Stone & Tile Ltd	406020, 203440	Inactive	Cotswold
PRESTON FOLLY	Duchy of Cornwall	390610, 195295	Inactive	Cotswold
SHENBERROW	Huntsmans Quarries Ltd	408245, 233900	Inactive	Cotswold

JURASSIC LIMESTONES – 'Crushed Rock' Aggregate & Non-aggregate uses cont.

QUARRY NAME	OPERATOR / OWNER	LOCATION *(Grid Reference)*	OPERATING STATUS	DISTRICT AREA
SOUNDBOROUGH	Mr Wills/Priory Construction Ltd	405235, 221600	Inactive	Cotswold
STANLEYS	Stanley's Quarry	414980, 236250	Active	Cotswold
SWELLWOLD	Cotswold Stone Quarries	414820, 226790	Active	Cotswold
SYREFORD	Cotswold Stone Quarries	402500, 220630	Active	Cotswold
THREE GATES	Huntsmans Quarries Ltd	408100, 229480	Inactive	Cotswold
TINKERS BARN	Cotswold Stone Quarries	411315, 225880	Active	Cotswold
VEIZEYS	Stone Supplies (southern)	388140, 194440	Active	Cotswold
WESTINGTON	Atlas Stone Products Ltd	413990, 236730	Inactive	Cotswold

CARBONIFEROUS LIMESTONES – 'Crushed Rock' Aggregate & Non-aggregate uses

QUARRY NAME	OPERATOR / OWNER	LOCATION *(Grid Reference)*	OPERATING STATUS	DISTRICT AREA
DRYBROOK	Hanson Aggregates	364010, 217900	Active	Forest of Dean
PERSERVERANCE	Forest Enterprises	365125, 211165	Inactive	Forest of Dean
ROGERS	Tarmac Ltd	355870, 211170	Inactive	Forest of Dean
SHAKEMANTLE	Mr & Mrs Waters	365320, 211355	Inactive	Forest of Dean
STOWEHILL/CLEARWELL	Clearwell Quarries Ltd	356500, 206500	Active	Forest of Dean
STOWFIELD	Tarmac Ltd	355500, 211175	Active	Forest of Dean

CARBONIFEROUS & JURASSIC CLAYS – Various non-aggregate uses

QUARRY NAME	OPERATOR / OWNER	LOCATION *(Grid Reference)*	OPERATING STATUS	DISTRICT AREA
BROADMOOR BRICKWORKS	Broadmoor Brickworks Ltd	265250, 215250	Active	Forest of Dean
ROYAL F.O.D BRICKWORKS (HAWKWELL GREEN)	Coleford Brick & Tile Co Ltd	364490, 215270	Active	Forest of Dean
WELLACRE	Northcot Brick Ltd	418040, 237030	Active	Cotswold

DEVONIAN, CARBONIFEROUS & PERMIAN SANDSTONES – Non-aggregate uses

QUARRY NAME	OPERATOR / OWNER	LOCATION *(Grid Reference)*	OPERATING STATUS	DISTRICT AREA
ASTONBRIDGE	Mr E. S Morris	362047, 215873	Active	Forest of Dean
BIRCH HILL	Mr Martin	359655, 208625	Active	Forest of Dean
BIXHEAD/BARNHILL	Forest Enterprises	359710, 210890	Active	Forest of Dean
COPES STONE	Mr Bull & Forest Enterprises	365570, 207490	Active	Forest of Dean
GREAT BERRY	Wilderness (Haulage) Ltd	361655, 215055	Inactive	Forest of Dean
MEEZY HURST	Forest Enterprises	364120, 208950	Inactive	Forest of Dean
MINETRAIN	Mr Tainton	360150, 210120	Active	Forest of Dean

DEVONIAN, CARBONIFEROUS & PERMIAN SANDSTONES – Non-aggregate uses cont.

QUARRY NAME	OPERATOR / OWNER	LOCATION *(Grid Reference)*	OPERATING STATUS	DISTRICT AREA
MONUMENT	Mr M. Bradley	360100, 209900	Active	Forest of Dean
NAILBRIDGE	Wilderness (Haulage) Ltd	364460, 216160	Inactive	Forest of Dean
PUDDLEBROOK	Forest Enterprises	364630, 218275	Inactive	Forest of Dean
OLD FLOUR MILLS	Mr. G.E Morgan	360500, 206670	Inactive	Forest of Dean
WILDERNESS	Wilderness (Haulage) Ltd	367185, 218700	Active	Forest of Dean
WIMBERRY	Forest Enterprises	359415, 212115	Inactive	Forest of Dean
KNOBB	Mr G Symonds & M Price	360280, 211267	Active	Forest of Dean

Appendix B: Waste Sites Gloucestershire

MATERIALS RECYCLING / RECOVERY & TREATMENT FACILITIES

SITE NAME / ADDRESS	OPERATOR	DISTRICT
Myers Road, Gloucester	Allstone Sands & Gravels Aggregates Trading Company Ltd	Gloucester City
Monk Meadow Dock, Gloucester	Complete Utilities Ltd	Gloucester
Huntsmans Quarry, Buckle Street, Naunton	Huntsmans Quarries Ltd	Cotswold
Unit 46a Harbour Lane Industrial Estate, Lydney	Hemmings Waste Management Ltd	Forest of Dean
Unit 48 Lydney Industrial Estate, Lydney	Lydney Sand and Gravels Ltd	Forest of Dean
Netherhills Transport Depot, Fromebridge	Moreton C Cullimore Ltd	Stroud
Moreton Valence, Near Whitminster	Smiths (Gloucester) Ltd	Stroud
Babdown Airfield, Tetbury	Valley Trading Limited	Cotswold

COMPOSTING FACILITIES

SITE NAME / ADDRESS	OPERATOR	DISTRICT
Welsh Way Treatment	Agricultural Supply Co (Fairford) Ltd	Cotswold
Birwood Villa Farm, Huntley	A G King	Forest of Dean
Rose Hill Farm, Dymock	Cory Environmental (Glos.) Ltd	Forest of Dean
Fretheme, Near Saul	Fretheme Nurseries	Stroud
Thistledown Farm, Tinkley Lane, Hypsfield	John Rhodes	Stroud
Dawn Field, Blakeney	Ms Rebekah Hoyland	Forest of Dean

HOUSEHOLD RECYCLING CENTRES (HRC's)

SITE NAME / ADDRESS	OPERATOR	DISTRICT
Fosse Cross, Calmsden	Environmental Waste Controls Plc	Cotswold
Pyke Quarry, Nr. Horsley	Environmental Waste Controls Plc	Cotswold
Swindon Road, Cheltenham	Cheltenham Borough Council	Cheltenham
Oak Quarry, Coleford	Environmental Waste Controls Plc	Forest of Dean
Sudmeadow, Hempsted	Environmental Waste Controls Plc	Gloucester City
Wingmoor Farm, Bishop's Cleeve	Environmental Waste Controls Plc	Tewkesbury

END-OF-LIFE VEHICLE DISMANTLING & METAL RECYCLING FACILITIES

SITE NAME / ADDRESS	OPERATOR	DISTRICT
Ashville Works, Bristol Road, Gloucester	Avon Metals	Gloucester City
Bladchall, Berkeley Road, Berkeley	B A J Reece & Stubbs	Stroud
Downwood Mill, Stroud	B&K Dismantlers	Stroud
Hayricks Wharf, Tewkesbury Road	Burke Brothers (Cheltenham) Ltd	Cheltenham
Withylade Estate, Highleadon	Caps UK Ltd	Forest of Dean
232a Bristol Road, Gloucester	Cleave Motor Salvage	Gloucester City
Empire House, Empire Way, Gloucester	CMS Group Ltd	Gloucester City
Byard Road, Gloucester	European Metal Recycling	Gloucester City
Eastern Ave, Gloucester	City Auto Salvage	Gloucester City
Berkeley Road, Dursley	Dursley Auto Dismantlers	Stroud
Sharprness Docks, Berkeley	E L G Haniel Metals Ltd	Stroud
Broadmoor Road, Cinderford	FAB Recycling Ltd	Forest of Dean
Forest Vale Industrial Estate, Cinderford	Forest Auto Salvage	Forest of Dean
Unit G2, High Orchard Road, Gloucester	Gloucester Motor Spares	Gloucester City
Abbey Works, Hempsted Lane, Gloucester	Hayes Metals	Gloucester City
Golden Valley, Gloucester Road	Henry Raymond Buckland	Tewkesbury
Hawkwell Green, Cinderford	J Woodward Autospares	Forest of Dean
91 Ryecroft Street, Gloucester	Jessop Motors Vehicle Dismantler	Gloucester City
Eastern Ave, Gloucester	Jim's Auto Parts	Gloucester City
Cambridge Mills, Cambridge	John Keedwell	Stroud
Eastern Ave, Gloucester	JC Autos	Gloucester City
Forest Vale Industrial Estate, Cinderford	M F Freeman Ltd	Forest of Dean
Ryecroft Industrial Estate, Stonehouse	M, MS, MT, MP Burford	Stroud
Evesham Road, Bishop's Cleeve	Mitchell Vehicle Dismantling	Tewkesbury
Bath Road Farm, Nympsfield	M & N Motor Services	Stroud
Unit 8, Broadway Trading Estate, South Cerney	Never Despair Breakers	Cotswold
Springhill Industrial Estate, Moreton-in-Marsh	Oil Tank Supplies	Cotswold
7 Parliament Street, Stroud	Osbornes	Stroud
Unit 1, Ward Industrial Estate, Lydney	P S W Metals	Forest of Dean
160b Barton Street, Gloucester	R & B Middleton	Gloucester City
Chase Lane, Gloucester	South West Salvage	Gloucester City
Unit 7 & 48, Forest Vale Industrial Estate, Cinderford	Simms Metal UK Ltd	Forest of Dean
Tewkesbury Road, Twigworth	Twigworth Breakers Ltd	Tewkesbury
Old Brick Works, Stonehouse	Whittakers	Stroud
Central Engineering Works, Lydbrook	Wyeside Spares	Forest of Dean

WASTE TRANSFER STATIONS - including all household, commercial & industrial, special / hazardous and clinical wastes

SITE NAME / ADDRESS	OPERATOR	DISTRICT
Myers Road, Gloucester	Allstone Sands & Gravels Aggregates Trading Company Ltd	Gloucester City
Bourton Industrial Park, Bourton on the Water	Aztec Phoenix Ltd	Cotswold
Former Coal Wharf, Hawkwell, Drybrook	Bell Waste	Forest of Dean
Canal Works, Harbour Lane, Lydney	Bendalls of Lydney	Forest of Dean
Elliot Road, Cirencester	Cory Environmental (Glos.) Ltd	Cotswold
Phoenix House, Stoke Road, Elmstone Hardwicke	Cory Environmental (Glos.) Ltd	Tewkesbury
Wingmoor Farm, Stoke Road, Stoke Orchard	Cory Environmental (Glos.) Ltd	Tewkesbury
Stubbs Farm, Kempsford	Earthline Ltd	Cotswold
Valley Road, Cinderford	Englehard Industries Ltd	Forest of Dean
Eastern Ave. Depot, Gloucester	Gloucester City Council	Gloucester City
Great Western Road, Gloucester	Gloucestershire Royal Hospital	Gloucester City
Unit 46a Harbour Lane Industrial Estate, Lydney	Hemmings Waste Management Ltd	Forest of Dean
Buckle Street, Honeybourne, Evesham	HT Waste Recycling Ltd	Cotswold
Hempsted Lane, Gloucester	Keyway (Gloucester) Ltd	Gloucester City
7 Honeyborne Road, Evesham	MPH Europe Ltd	Cotswold
Ham Villa, Charlton Kings	Mr B Stevens & Mr R Stevens	Cheltenham
Banfurlong Depot, Golden Valley, Gloucester Road	WS Atkins	Tewkesbury
Cannop Depot, Vallets Wood, Cannop	WS Atkins	Forest of Dean
Moreton Valence, Near Whitminister	Smith's (Gloucester) Ltd	Stroud
Newtown Industrial Estate, Northway Lane, Tewkesbury	Smith's (Gloucester) Ltd	Tewkesbury
Abbey Road, Hempsted	Speedy Skips	Gloucester City
Lower Lode Depot, Lower Lode Lane	Tewkesbury Borough Council	Tewkesbury
The Old Post Office, Newport	Red Star Skip Hire	Stroud
Babdown Airfield, Tetbury	Valley Trading	Stroud
Shannon Place, Shannon Way, Ashchurch	Vetspeed Ltd	Tewkesbury
E A J Davis, Monkmeadow, Hempsted	West Oils	Gloucester City
Wilderness Quarry, Mitcheldean	Wilderness (Haulage) Ltd	Forest of Dean

SPECIAL/HAZARDOUS WASTE TREATMENT FACILITIES

SITE NAME / ADDRESS	OPERATOR	DISTRICT AREA
Wingmoor Farm, Stoke Road, Bishop's Cleeve	Grundon Waste Management Ltd	Tewkesbury

INCINERATORS

SITE NAME / ADDRESS	OPERATOR	DISTRICT AREA
Cricklade Road, Cirencester	Fosse Dogotel & Cattery	Cotswold
Limekiln Farm, Middle Lypiatt	Andrew & Caroline Uys	Stroud
Foss Cross Industrial Estate, Calmsden	Mr G Jackson	Cotswold

NON – HAZARDOUS BIO-DEGRADABLE LANDFILL

SITE NAME / ADDRESS	OPERATOR	DISTRICT AREA
Sudmeadow, Hempsted, Gloucester	Cory Environmental (Glos.) Ltd	Gloucester
Wingmoor Farm, Stoke Road, Bishop's Cleeve	Cory Environmental (Glos.) Ltd	Tewkesbury
Perry Way, Frampton-on-Severn	Hales Waste Control Ltd	Stroud
Wingmoor Farm, Stoke Road, Bishop's Cleeve	Grundon Waste Management Ltd	Tewkesbury

NON – HAZARDOUS INERT LANDFILL

SITE NAME / ADDRESS	OPERATOR	DISTRICT AREA
Nympsfield, Stroud	A R Smith	Stroud
Whitehouse Farm, Sling, Coleford	Clays Wood Reclamation	Forest of Dean
Ebley, Stroud	Cotswold Canal Trust	Stroud
Tutnalls, Lydney	Federal Mogul	Forest of Dean
Sling, Coleford	Fred Watkins Engineering Ltd	Forest of Dean
Perry Way, Frampton-on-Severn	Hales Waste Control Ltd	Stroud

HAZARDOUS LANDFILL

SITE NAME / ADDRESS	OPERATOR	DISTRICT AREA
Wingmoor Farm, Stoke Road, Bishop's Cleeve	Grundon Waste Management Ltd	Tewkesbury

Appendix C: Key Monitoring Stakeholders for the AMR

The following organisations have been catergorised as key monitoring stakeholders for the purposes of the AMR. A draft copy of the AMR was made available to each of these organisations for consultation during late November 2006. Information that has been collected and, or will be collected in the future, is likely to be dependant upon continued close working and partnership between each of these organisations and Gloucestershire County Council : -

- Cheltenham Borough Council
- Cotswold District Council
- Environment Agency
- English Heritage
- Forest of Dean District Council
- Gloucester City Council
- Government Office for the South West (GOSW)
- Highways Agency
- Natural England
- South West Regional Assembly (SWRA)
- Stroud District Council
- Tewkesbury Borough Council

Appendix D: Preferred Areas allocated by the Minerals Local Plan (MLP) for future Minerals Extraction

Preferred Sites	Site Area	Proposed Mineral for Extraction
Stowhill / Clearwell	40.9 ha	Carboniferous Limestone
Drybrook	11 ha	Carboniferous Limestone
Stowfield	14.5 ha	Carboniferous Limestone
Daglingworth	18 ha	Jurassic Limestone
Huntsmans	62 ha	Jurassic Limestone
Dryleaze Farm	37 ha	Sand & Gravel
Cerney Wick	16.5 ha	Sand & Gravel
Horcott / Lady Lamb Farm	100 ha	Sand & Gravel
Kempsford / Whelford	185 ha	Sand & Gravel

Appendix E: Preferred Areas & Areas of Search allocated by the Waste Local Plan (WLP) for future Waste Management Facilities

Preferred Sites / Areas of Search	Site Area	Strategic Site (+50,000 tpa capacity) *or* Local Site (-50,000tpa capacity)
Wingmoor Farm (West)	66.1 hectares	Strategic
Wingmoor Farm (East)	48.7 hectares	Strategic
Sudmeadow	142 hectares	Strategic
Former Moreton Valence Airfield	11.2 hectares	Strategic
Sharpness Docks (Sites A & B)	Site A – 17.2 hectares Site B – 8.4 hectares	Strategic
Reclaimed Canal Land at Netheridge	1 hectare	Strategic (As an ancillary facility to potentially Sharpness Docks)
Gloucester Business Park	15 hectares	Local
Moreton-in-Marsh (Sites North & South)	North – 5.3 hectares South – 4.5 hectares	Local
Phoenix House, Elmstone Hardwicke	0.02 hectares	Local
Land at the Rear of Dowty, Staverton	5 hectares	Local
The Railway Triangle, Gloucester	7.7 hectares	Local
Land adjacent to Sudmeadow	6.5 hectares	Local
Forest Vale Industrial Estate, Cinderford (Sites A & B)	Site A – 1.2 hectares Site B – 1.2 hectares	Local
The Canal Works, Lydney	1.0 hectares	Local
Wilderness Quarry	0.5 hectares	Local
Wingmoor Farm (South-East)	22.3 hectares	Local
Foss Cross Industrial Estate	6.4 hectares	Local
Former Moreton Valence Airfield	2 hectares	Local
Land adjacent to Gasworks, Bristol Rd	3.4 hectares	Local
Netherhills Pit, Frampton-on-Severn (North Parcel & Two Southern Parcels)	North – 7.25 hectares South – 6 hectares	Local

Appendix F: Waste Stream Definitions for the AMR

Waste types	Definition of waste types	Waste sub-category and definitions
Commercial & Industry Waste (C&I)	Waste that is derived from factories, utility operators such as water, electricity, gas and sewerage providers, trade establishments, miscellaneous businesses, sports & recreation centres and entertainment premises. It excludes waste generated by agricultural businesses, mines and quarry operators.	**BIODEGRADABLE WASTE:** Waste that is capable of undergoing anaerobic or aerobic decomposition, such as food and garden waste, paper and paperboard. A proportion of C&I and MSW waste will be of a biodegradable nature.
Municipal Solid Waste (MSW)	Municipal solid waste (MSW) is made up of household waste and other wastes collected by a waste collection authority or its contractors, such as municipal parks and gardens waste, beach cleansing waste and any commercial and industrial waste for which the collection authority takes responsibility.	**NON-BIODEGRADABLE WASTE:** Waste that does not undergo anaerobic or aerobic decomposition. It includes glass, plastic, non-combustables and ferrous and non-ferrous metals. Non-biodegradable includes a proportion of C&I and MSW waste and incorporates all Inert, Metal and Special Waste types.
Inert Waste	Waste that is non-biodegradable or decompostable *(or will only do so at a very slow rates)* and is chemically inert. Examples include; clay, sand, brick, stone, silica and glass	
Metal Waste	Waste that is derived from metal processing such as off-cuts, stampings, turnings and grindings. It is also incorporates the metaliferous fraction of end-of-life vehicles *(e.g. scrapped cars etc.)* and dismantled industrial plant, railway rolling stock and rail tracks.	
Hazardous Waste	Waste as defined by the Special Waste Regulations (1996). It is described as toxic, very toxic, harmful, corrosive, irritant or carcinogenic and is considered to be either hazardous or dangerous to handle. Examples include; wood preservatives, solvents, adhesives and pesticides * Revised definition and name change for special waste based upon 2005 Regulations; *Hazardous wastes are those, which pose particular risks to health and the environment.* *Examples include: oil contaminated materials; some household items (televisions, computer monitors, fluorescent lighting); wood preservatives, solvents, incinerator fly ash, batteries, adhesives and pesticides.*	

Appendix G: Glossary of Terms

After care - The process of maintaining land once mineral working and restoration has taken place to ensure the required standard is achieved for an agreed end use.

After use - The intended use of land following cessation of mineral working and completed programme of restoration.

Aggregates - Sand, gravel, crushed rock and other bulk materials used by the construction industry

Amenity - A positive element or elements that contribute to the overall character or enjoyment of an area. For example, open land, trees, historic buildings and the inter-relationship between them, or less tangible factors such as tranquillity.

Annual Monitoring Report (AMR) - Assesses the implementation of the LDS and extent to which the policies in LDDs are being achieved.

Apportionment - The splitting of regional guidelines for minerals between planning authorities or sub regions.

Area Action Plan (AAP) - Provide a planning framework for areas of change and areas of conservation.

Area of Outstanding Natural Beauty (AONB) - A landscape area of high natural beauty, which has been designated under the National Parks and Access to the Countryside Act (1949).

British Geological Survey (BGS) - Public sector organisation responsible for advising the government on all aspects of geoscience as well as providing impartial geological advice to industry, academia and the public.

Carboniferous - A division of geological time from around 360 to 290 million years ago.

Clay - A very fine-grained mineral with particles measuring less than 0.002 mm. It has high plasticity when wet and considerable strength when air-dry. It is a very useful engineering mineral.

Coal - Combustible mineral formed from organic matter (mostly plant material). A fossil fuel commonly used in energy production.

Community Strategy - The Local Government Act 2000 requires local authorities to prepare a Community Strategy. It sets out the broad vision for the future of the local authority's area and proposals for delivering that vision.

Core Strategy - Sets out the long-term spatial vision for the local planning authority area and the strategic policies and proposals to deliver that vision.

Crushed Rock - Hard types of rock, which have been quarried, fragmented and graded for use as aggregate.

Department for Communities & Local Government (DCLG) - Government department with national responsibility for; housing, urban regeneration, local government, and planning. It Replaced, the ODPM in 2006.

Department for the Environment Food & Rural Affairs (DEFRA) - Government department with national responsibility for sustainable waste management

Deputy Gaveller - A Crown official who is appointed to administer mining rights within the Forest of Dean.

Development Control policies - A set of criteria-based policies required to ensure that all development within the area meets the vision and strategy set out in the core strategy.

Development Plan - In Gloucestershire this comprises the Structure Plan, district local plans, Waste Local Plan and Minerals Local Plan.

Development Plan Document (DPDs) - These are spatial planning documents that are subject to independent examination. They will have 'development plan' status. See the definition of Minerals & Waste Development Plan Document below.

EC Directive - A European Community legal instruction, which is binding on all Member States, but must be implemented through legislation of national governments within a prescribed timescale.

Engagement - Entering into a deliberative process of dialogue with others, actively seeking and listening to their views and exchanging ideas, information and opinions. Unlike 'mediation' or 'negotiation' engagement can occur without there being a dispute to resolve.

Enquiry by Design - This process helps reach agreement between groups that would normally hold differing aspirations by bringing them together and focusing on the sustainability and quality of the urban environment itself. All concerns - technical, political, environmental and social - are tested and challenged by the design itself, so that design leads rather than follows the process.

Environment Agency - Established in April 1996, combining the functions of former local waste regulation authorities, the National Rivers Authority and Her Majesty's Inspectorate of Pollution.

Environmental Report - A document required by the SEA Directive as part of an environmental assessment, which identifies, describes and evaluates the likely significant effects on the environment of implementing a plan or programme.

Freeminer - A man of 21 years and upwards born and abiding within the *'hundred of St. Braivels'* of Gloucestershire who has worked a year and a day in a mine.

Government Office for the South West (GOSW) - The Government's regional office. Local Planning Authorities will use this office as a first point of contact for discussing the scope and content of Local Development Documents and procedural matters.

Green Belt - Areas of land defined in Regional Spatial Strategies, Structure Plans and district-wide Local Plans that are rural in character and adjacent to urban areas, where permanent and strict planning controls apply in order to; check the unrestricted sprawl of built up areas; safeguard the surrounding countryside from further encroachment; prevent neighbouring towns from merging into one another; preserve the special character of historic towns and assist urban regeneration.

Greenfield Site - A site previously unaffected by built development.

Greenhouse Gases - Gases such as methane and carbon dioxide that are believed to contribute to global warming by trapping heat between the earth and the atmosphere.

Hydrogeology - The study of the movement of water through its associated rock strata.

Inspector's Report - This will be produced by the Planning Inspector following the Independent Examination and will be binding on the County Council.

Jurassic - A division of geological time from around 200 to 135 million years ago.

Landbank - A stock of planning permissions for the winning and working of minerals. It is composed of the sum of all permitted reserves at active and inactive sites at a given point in time, and for a given area.

Landfill - The deposit of waste onto and into land in such a way that pollution or harm to the environment is prevented and, through restoration, to provide land, which may be used for another purpose.

Landraise - Where land is raised by the deposit of waste material above existing or original ground level.

Land Use Planning - The Town and Country Planning system regulates the development and use of land in the public interest, and has an important role to play in achieving sustainable mineral extraction.

Lias - A greyish rock, which can be split easily into slabs. In Gloucestershire it is used to describe certain clay minerals.

Local Development Framework (LDF) - Comprises a portfolio of local development documents that will provide the framework for delivering the spatial planning strategy for the area.

Local Development Document (LDD) - A document that forms part of the Local Development Framework. Can either be a Development Plan Document or a Supplementary Planning Document.

Local Development Scheme (LDS) - Sets out the programme for the preparation of the local development documents. Must be submitted to Secretary of State for approval within six months of the commencement date of the Act regardless of where they are in terms of their current development plan.

Local Strategic Partnership (LSP) - Non-statutory, non-executive body bringing together representatives of the public, private and voluntary sectors. The LSP is responsible for

Mediation - Intervention into a dispute by an acceptable impartial neutral person whose role it is to assist the parties in dispute to reach their own mutually acceptable settlement. It is essentially a voluntary procedure, its proceedings are confidential to the participants; any settlement however can be made public with the agreement of all parties.

Mine - A place or area from which commercial minerals are removed from the Earth.

Mineral - A rock or other such similar material that has a commercial value when extracted and / or processed.

Mineral Consultation Area (MCA) - An area identified in order to ensure consultation between the relevant minerals planning authority, local planning authority, the minerals industry and others before certain non-mineral planning applications made within the area are determined.

Mineral Development - Any activity related to the exploration for or winning and working of minerals, including tipping of spoil and ancillary operations such as the use of processing plant.

Minerals & Waste Development Plan Document (M&WDPD) - Spatial minerals and waste related planning documents that are subject to independent examination. There will be a right for those making representations seeking change to be heard at an independent examination.

Minerals & Waste Development Scheme (M&WDS) - Sets out the programme for the preparation of the minerals and waste development documents. Must be submitted to Secretary of State for approval within six months of the commencement date of the Act regardless of where they are in terms of their current development plan.

Minerals & Waste Development Framework (M&WDF) - Comprises a portfolio of minerals and waste development documents which will provide the framework for delivering the spatial minerals and waste planning strategy for the area.

MPG - Mineral Planning Guidance - Government policy statements exclusively for minerals that are material considerations in determining planning applications.

MPS - Mineral Policy Statement - Guidance documents which set out national mineral planning policy. They are being reviewed and updated and are replacing MPGs.

Negotiation - Process of reaching consensus by exchanging information, bargaining and compromise that goes on between two or more parties with some shared interests and conflicting interests. Negotiation is likely to be part of the process of mediation, but can also happen outside of any formal mediation and without the assistance of a neutral person.

Office of the Deputy Prime Minister (ODPM) - Former Government department with responsibility for planning and local government. Replaced by DCLG in 2006.

Opencast Quarrying - A form of surface mining to win minerals, where the overburden material is literally 'cast' from the working face to the rear as the mineral is exposed.

Planning Aid - Voluntary provision by planners of free and independent professional advice on planning to individuals or groups unable to afford to pay for the full costs of such advice. Planning Aid includes the provision of training so that its clients can be empowered through better understanding of how the planning system works and the development of skills that enable them to present their own case more effectively.

Planning Inspectorate (PINS) - The Government agency responsible for scheduling independent examinations. PINS employ planning Inspectors who sit on independent examinations.

Planning Policy Guidance Notes (PPGs) - Government policy statements on a variety of issues that are material considerations in determining planning applications.

Planning Policy Statement (PPS) - Guidance documents which set out national planning policy. They are being reviewed and updated and are replacing PPGs.

Permitted Reserves - Mineral deposits with the benefit of planning permission for extraction.

Preferred Area - Area containing mineral resources, which can be identified with a high degree of certainty and where the principle of extraction has been established. Theses areas must be subject to extensive consultation before they are formally delineated.

Proposals Map - Illustrates the policies and proposals in the development plan documents and any saved policies that are included in the local development framework.

Public Consultation - A process through which the public is informed about proposals fashioned by a planning authority or developer and invited to submit comments on them.

Quarry - A type of open-pit mine from which rock or minerals are extracted. They are often shallower than other types of open-pit mine.

Reclamation - The process of returning an area to an acceptable environmental state, whether for the resumption of the former land use or for a new use. It includes restoration, aftercare, soil handling, filling and contouring operations.

Recycled Aggregates - Aggregates produced from recycled construction waste such as crushed concrete, road planning's etc.

Recycling - Involves the reprocessing of waste materials, either into the same product or a different one.

Re-use - The reuse of materials in their original form, without any processing other than cleaning. Can be practised by the commercial sector with the use of products designed to be used a number of times, such as re-useable packaging. Householders can purchase products that use refillable containers, or re-use plastic bags. The processes contribute to sustainable development and can save raw materials, energy and transport costs.

Regional Planning Guidance (RPG) - Produced by the Government Office for the South West (GOSW) on behalf of the Secretary of State. Until it is replaced by the new Regional Spatial Strategy (RSS) it provides a regional strategy within which Local Plans, Local Development Documents and the Local Transport Plan should be prepared.

Regional Aggregate Working Party (RAWP) - Supports and advises on aggregate mineral options and strategies for the region. Also assists in the local apportionment exercise for the regional guidelines for aggregate provision.

Regionally Important Geological Site (RIG) - A non-statutory regionally important geological or geo-morphological site (basically relating to rocks, the Earth's structure and landform).

Regional Spatial Strategy (RSS) - This document is being prepared by the South West Regional Assembly and will replace the Regional Planning Guidance for the South West. It will have statutory development plan status.

Resources - A potential mineral deposit where the quality and quantity of material present has not been tested. *(This would also include those areas that have been granted permission subject to the completion of a legal agreement, which has yet to be completed. These sites do not have planning permission and have not been included in the land-bank or counted as permitted reserves)*

Restoration - The methods by which the land is returned to a condition suitable for an agreed after-use following the completion of tipping operations.

Special Areas of Conservation (SAC) - Designation made under the Habitats Directive to ensure the restoration or maintenance of certain natural habitats and species some of which may be listed as 'priority' for protection at a favourable conservation status.

Sand & Gravel - A finely divided rocks, comprising of particles or granules that range in size from 0.063 to 2 mm for sand, and up to 64 mm for gravel. It is used as an important aggregate mineral.

Saved Plan/Policies - Under the Planning and Compulsory Purchase Act 2004 the Gloucestershire Minerals and Waste Local Plans have been 'saved' for a period of three years (either from the date of adoption or September 2004 as appropriate).

Secondary Aggregates - Minerals derived from the by-products of the extractive industry that can be used for aggregate purposes, e.g. china clay waste, colliery spoil, blast furnace slag, pulverised fuel ash.

Settlement Protection Boundaries (SPBs) - Areas previously identified for the Upper Thames Valley sand & gravel resource area in the Minerals Local Plan (MLP). The purpose of SPBs is to prevent settlements from becoming 'islands' closely constrained by mineral working. Any proposals for working and subsequent restoration within SPB's will need to be rigorously examined by the MPA.

Site-specific allocations and policies - Allocations of sites

for specific or mixed uses or development. Policies will identify any specific requirements for individual proposals.

South West Regional Assembly (SWRA) - Body responsible for regional planning and mineral strategy matters in the South West

Special Protection Area (SPA) - Designations made under the EC Directive 79/409 on bird conservation (The Birds Directive), the aim of which is to conserve the best examples of the habitats of certain threatened species of bird the most important of which are included as priority species.

Stakeholder - Anyone who is interested in, or may be affected by the planning proposals that are being considered.

Strategic Environmental Assessment (SEA) - Local Planning Authorities must comply with European Union Directive 2001/42/EC which requires a high level, strategic assessment of local development documents (DPDs and, where appropriate SPDs) and other programmes (e.g. the Local Transport Plan and the Municipal Waste Management Strategy) that are likely to have significant effects on the environment.

Statement of Community Involvement (SCI) - The County Council must produce a local development document, which sets out how and when the community can get involved in the preparation of DPDs. It should also set out the LPA's vision and strategy for community involvement, how this links to other initiatives such as the community strategy, and how the results will feed into DPD preparation. The SCI should be subject to independent examination.

Structure Plan - A broad land use and transport strategy, which establishes the main principles and priorities for future development. Prepared by the County Council as part of the Development Plan.

Supplementary Planning Document (SPD) - Policy guidance to supplement the policies and proposals in development plan documents. They will not form part of the development plan or be subject to independent examination. (Formally known as Supplementary Planning Guidance)

Sustainability Appraisal (SA) - Local Planning Authorities are bound by legislation to appraise the degree to which their plans and policies contribute to the achievement of sustainable development. The process of Sustainability Appraisal is similar to Strategic Environmental Assessment but is broader in context, examining the effects of plans and policies on a range of social, economic and environmental factors. To comply with Government policy, Gloucestershire County Council is producing a Sustainability Appraisal that incorporates a Strategic Environmental Assessment of its Minerals and Waste Local Development Documents.

Strategic Environmental Assessment (SEA) - A legally enforceable assessment procedure, which is required under European legalisation. It requires the systematic assessment of the environmental effects of strategic plans. It typically applies to regional development plans, transport plans, waste management plans, energy plans and tourism programmes.

Sustainable Development - Development, which seeks to meet the needs of the present
without compromising the ability of future generations to meet their own needs.

Sustainable Mineral Extraction - Means using mineral resources efficiently, so as to carry out mineral working only where it is needed, ensuring that there is sufficient balance between the economic, social and environmental goals of sustainable development.

Voidspace - The remaining capacity in active or committed landfill or landraise sites

Waste - The wide ranging term encompassing most unwanted materials and is defined by the Environmental Protection Act 1990. Waste includes any scrap metal, effluent or unwanted surplus substances or articles that require to be disposed of because it is broken, worn out, contaminated or otherwise spoiled. Explosives and radioactive wastes are excluded.

Waste Arising - The amount of waste generated in a given locality over a given period of time.

Waste Hierarchy - Suggests that, the most effective environmental solution may often be to reduce the amount of waste generated – reduction. Where further reduction is not practicable, products and materials can sometimes be used again, either for the same or a different purpose – re-use. Failing that, value should be recovered from waste, through recycling, composting or energy recovery from waste. Only if none of the above offer an appropriate solution should waste be disposed of.

Waste Local Plan - A statutory land-use plan. Its purpose is to set out detailed land-use policies in relation to waste management development in the County.

Waste Management Licenses -Licenses are required by anyone who proposes to deposit, recover or dispose of controlled waste. The licensing system is separate from, but complementary to, the land use planning system. The purpose of a licence and the conditions attached to it is to ensure that the waste operation that it authorises is carried out in a way that protects the environment and human health.

Waste Minimisation - Reducing the volume of waste that is produced.

Appendix H: SEA / SA Objectives

1. To promote development that is socially, economically and environmentally sustainable.

2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.

3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.

4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the County.

5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.

7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.

8. To provide employment opportunities in both rural and urban areas of the County, promoting diversification in the economy.

9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.

10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.

11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the *'Precautionary Principle'*.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.

13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.

14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.

15. To reduce contributions to, and to adapt to, Climate Change.

Appendix I: List of Acronyms

AMR	Annual Monitoring Report
AONB	Area of Outstanding Natural Beauty
BVPI	Best Value Performance Indicator
C&D	Construction and Demolition Waste
C&I	Commercial and Industrial Waste
CI	Contextual Indicator
COI	Core Output Indicator
DPD	Development Plan Document
EA	Environment Agency
GCC	Gloucestershire County Council
LATS	Landfill Allowance Trading Scheme
LOI	Local Output Indicator
MCA	Minerals Consultation Area
MLP	Minerals Local Plan
MO	Monitoring Objective
MPA	Minerals Planning Authority
MPG	Minerals Planning Guidance Note
MPS	Minerals Policy Statement
MSW	Municipal Solid Waste
MTPA	million tonnes per annum
MWDF	Minerals and Waste Development Framework
MWDS	Minerals and Waste Development Scheme
OI	Output Indicator
PCPA	Planning and Compulsory Purchase Act (2004)
PPG	Planning Policy Guidance Note
PPS	Planning Policy Statement
RPG10	Regional Planning Guidance for the South West
RSS	Regional Spatial Strategy
RWS	Regional Waste Strategy
SA	Sustainability Appraisal
SCI	Statement of Community Involvement
SPD	Supplementary Planning Document
SWRA	South West Regional Assembly
SWRAWP	South West Region Aggregates Working Party
WCS	Waste Core Strategy
WLP	Waste Local Plan
WPA	Waste Planning Authority

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