

Central and Eastern Berkshire

Joint Minerals and Waste Plan

Issues and Options

Consultation Paper

Version 3_March 2017_non-trk change version



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Background and information

1. Introduction

- 1.1 Bracknell Forest Council, Reading Borough Council, the Royal Borough of Windsor and Maidenhead and Wokingham Borough Council (collectively referred to as 'Central & Eastern Berkshire Authorities') are working in partnership to produce a Joint Minerals & Waste Plan which will guide minerals and waste decision-making in the Plan area for the period up to 2036.
- 1.2 The Joint Minerals & Waste Plan will build upon the formerly adopted minerals and waste plans for the Berkshire area, and improve, update and strengthen the policies and provide details of strategic sites that are proposed to deliver the vision.
- 1.3 This is important because out of date plans allows less control over getting the right development, in the right location, at the right time to meet the current and future needs of the area with the local community having less of a say about where future development will be located..
- 1.4 Mineral and waste planning issues are most appropriately addressed jointly so that strategic issues can be satisfactorily resolved. The Plan will cover the minerals and waste planning authority administrative areas of Bracknell Forest, Reading, Windsor & Maidenhead and Wokingham (see Figure 1).

2. Development of the Joint Minerals and Waste Plan ('The Plan')

- 2.1 The Timetable for the Joint Minerals & Waste Plan has been agreed by the Central & Eastern Berkshire Authorities and is set out in each respective adopted Local Development Schemes¹.
- 2.2 This consultation paper forms the first stage in plan-preparation. The purpose of this consultation is to engage the community in discussion on the ISSUES for managing minerals and waste for the next 20 years. It is also an opportunity to gather more evidence to inform the OPTIONS for the plan policies and site allocations.

¹ Reading: http://www.reading.gov.uk/media/1053/Local-Development-Scheme/pdf/Local_Development_Scheme_November_2016.pdf

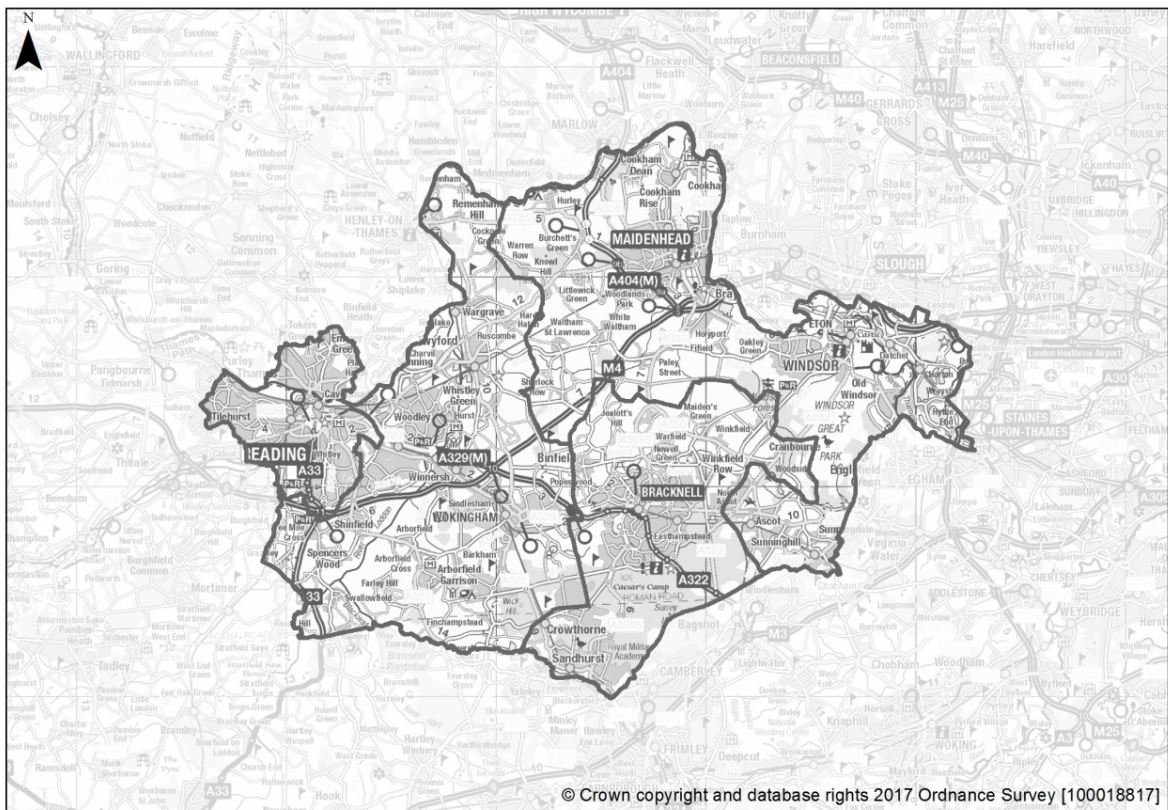
Bracknell Forest: <http://www.bracknell-forest.gov.uk/local-development-scheme-2016-to-2019.pdf>

Windsor and Maidenhead:

https://www3.rbwm.gov.uk/downloads/file/2462/local_development_scheme_-_2016_%E2%80%93_2019_oct_2016

Wokingham: <http://www.wokingham.gov.uk/planning/planning-policy/local-plan-update/>

Figure 1: Central & Eastern Berkshire Authorities administrative areas



2.3 This consultation paper is supported by a number of reports which set out the evidence for the contents provided. These reports include:

- *Minerals: Background Study* – sets out the types, availability and movements of minerals in the Plan area and what issues may affect future demand.
- *Waste: Data Report* – sets out the amounts and types of waste that needs to be managed, how it is currently managed and what the future waste management may be.
- *Methodologies Report* – sets out the proposed methodologies for assessing sites (including traffic and landscape assessments)
- *Sustainability Appraisal (incorporating Strategic Environmental Assessment) Scoping Report* – sets out how policies and sites will be assessed to ensure the Plan will not have any significant impacts on the Central & Eastern Berkshire environment, communities and economy.
- *Habitats Regulations Assessment: Methodology and Baseline* – sets out the European designated habitats that need to be considered during the Plan preparation and the proposed assessment methodology for assessing the potential impact of the Plan.
- *Consultation Strategy* – sets out how communities and key stakeholders will be consulted during the plan-making process.

- *Equalities Impact Assessment* – sets out how the Plan will be assessed during preparation stages to ensure it is not having an impact of particular sectors of Central & Eastern Berkshire’s communities.

2.4 Following the completion of the consultation, the information received will be used to update the evidence upon which decisions about the Plan will be made.

The next stages of The Plan

2.5 When preparing a Joint Minerals & Waste Plan, the Central & Eastern Berkshire Authorities have to make sure that certain processes and procedures are followed which are required by legislation. The process for plan-making is set out in Figure 2.

2.6 The following stage of the plan-making process will involve a consultation on the proposed draft policies and proposed sites – the ‘Preferred Options’ - that have been identified for minerals and waste development in order to meet future needs. These draft proposals will be accompanied by a number of evidence base documents including:

- An updated *Minerals: Background Study*
- An updated *Waste: Data Report*
- *Duty to Cooperate Statement* – a report on cross boundary issues and how these have been addressed in cooperation with key stakeholders.
- *Minerals: Proposal Study* – sets out the potential mineral sites and their suitability.
- *Waste: Proposal Study* – sets out potential waste sites and their suitability
- *Sustainability Appraisal (incorporating Strategic Environmental Assessment) Interim Report* – sets out the initial findings of the assessment of proposed sites and policies.
- *Habitats Regulations Assessment Screening Report* – sets out the scope for the assessment of impact on European designated sites.
- *Strategic Flood Risk Assessment Statement* – a review of existing Strategic Flood Risk Assessments, any updates to data and a review of proposed sites.
- *Strategic Traffic & Transport Assessment* – an initial assessment of the traffic impacts of the proposed sites.
- *Landscape & Visual Impact Assessment* – an initial assessment of the landscape impacts of the proposed sites.
- *Restoration Study* – a study of restoration issues and requirements within Central & Eastern Berkshire.
- *Minerals & Waste Safeguarding Study* – a study of the safeguarding requirements within Central & Eastern Berkshire.

2.7 The remainder of the Plan-making timetable is set out in Table 1. The ‘Regulations’ refer to planning procedures that planning authorities such as the Central & Eastern Berkshire Authorities have to adhere to when developing a Local Plan.

Table 1: Plan-making Timetable

Plan-making Stage	Timescale	Description
Regulation 18 ² (Issues & Options Consultation)	June - July 2017	Consultation on the initial work and the various options
Regulation 18 (Stage Two - Preferred Options Preparation)	July 2017 – Dec 2017	Draft Evidence Base Draft Plan based on Evidence Base and Consultation
Regulation 18 (Preferred Options Consultation)	Jan 2018 – May 2018	Consultation on the options selected as preferred
Regulation 19 ³ (Proposed Submission Document Preparation)	May 2018 – Oct 2018	Update Evidence Base Revise Plan based on Evidence Base and Consultation
Regulation 19 (Proposed Submission Document Consultation)	Nov 2018 – March 2019	Consultation on the Plan to be submitted to the Secretary of State
Regulation 22 ⁴ (Preparation)	March 2019 – Sept 2019	Update Evidence Base Proposed Modifications based on Evidence Base and Consultation
Regulation 22 (Submission to SoS)	Winter 2019	Submitting the Plan to the Secretary of State who appoints a Planning Inspector
Regulation 24 ⁵ (Public Examination)	Spring 2020	Planning Inspector examines the Plan
Regulation 25 ⁶ (Inspector’s Report)	Summer 2020	Planning Inspector delivers his report on the Plan
Regulation 26 ⁷ (Adoption)	Winter 2020	All authorities adopt the Plan, as modified by Planning Inspector

² The Town and Country Planning (Local Planning) (England) Regulations 2012 - <http://www.legislation.gov.uk/ukxi/2012/767/regulation/18/made>

³ The Town and Country Planning (Local Planning) (England) Regulations 2012 - <http://www.legislation.gov.uk/ukxi/2012/767/regulation/19/made>

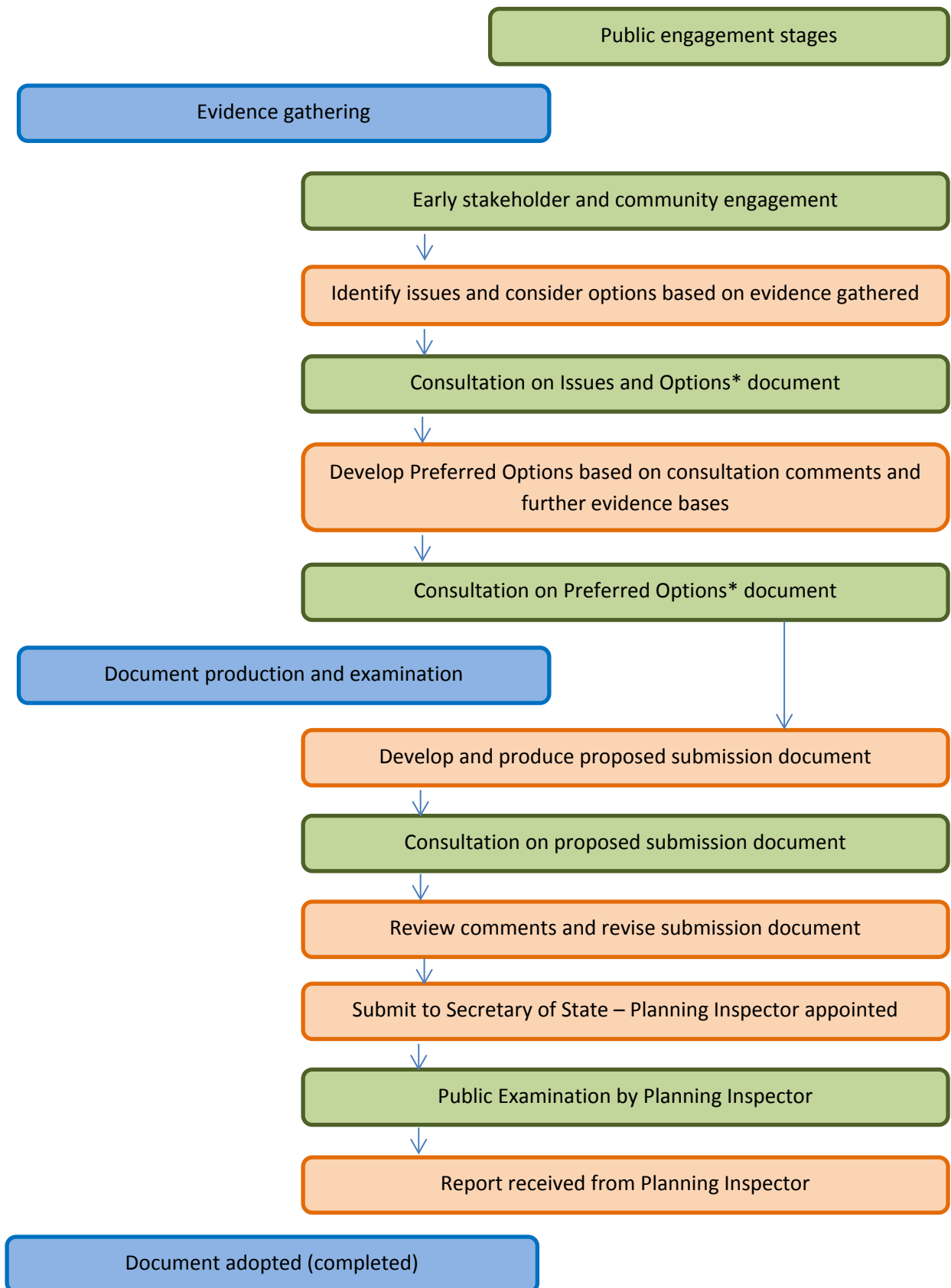
⁴ The Town and Country Planning (Local Planning) (England) Regulations 2012 - <http://www.legislation.gov.uk/ukxi/2012/767/regulation/22/made>

⁵ The Town and Country Planning (Local Planning) (England) Regulations 2012 - <http://www.legislation.gov.uk/ukxi/2012/767/regulation/24/made>

⁶ The Town and Country Planning (Local Planning) (England) Regulations 2012 - <http://www.legislation.gov.uk/ukxi/2012/767/regulation/25/made>

⁷ The Town and Country Planning (Local Planning) (England) Regulations 2012 - <http://www.legislation.gov.uk/ukxi/2012/767/regulation/26/made>

Figure 2: Plan-making process



*These stages can be undertaken as two separate stages (Issues & Options and Preferred Options) or as one Draft Options Stage

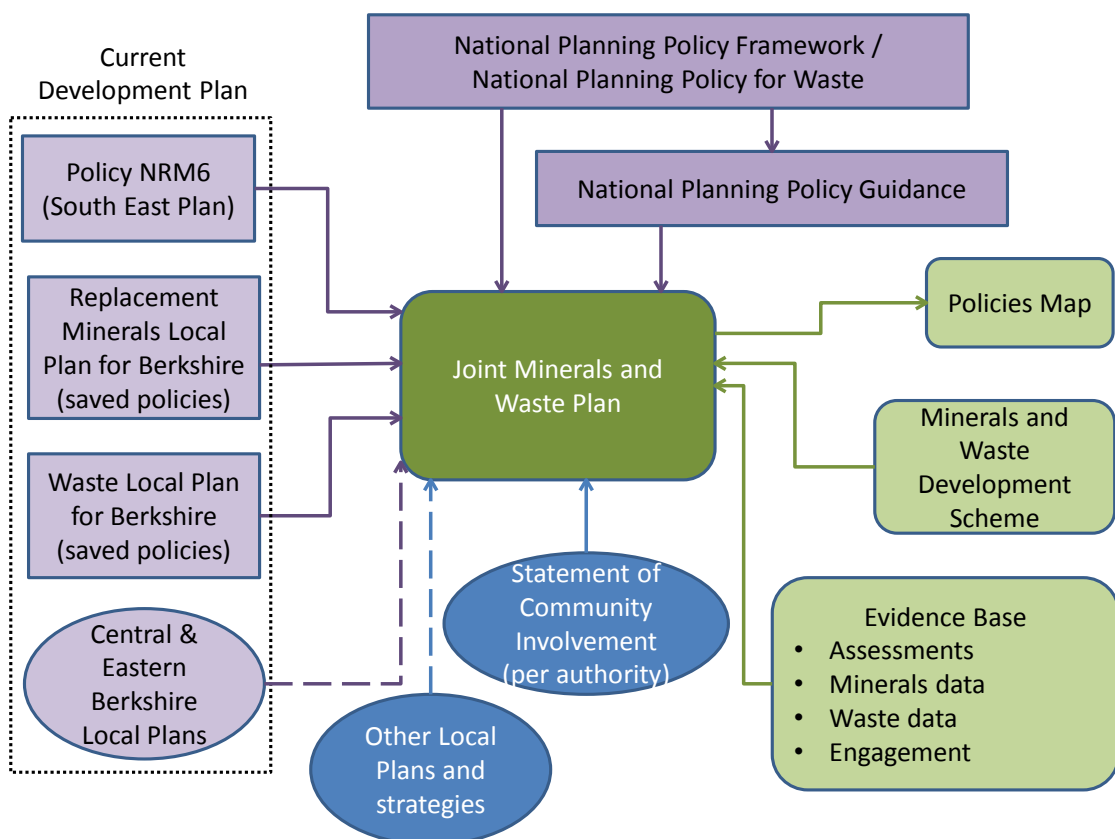
2.8 All Local Plans go through prescribed procedures and are subject to wide public consultation, and ultimately an independent public examination before being adopted. Local Plans are examined to assess 'soundness'⁸ (i.e. whether it is fit for purpose and has been prepared in accordance with national regulations) by an independent planning inspector appointed by the Planning Inspectorate.

3. Minerals and waste planning in Central and Eastern Berkshire

3.1 The Joint Minerals & Waste Plan will be a Local Plan, supported by other development documents, such as the Statement of Community Involvement, for each Authority. The Joint Minerals & Waste Plan will replace or 'supersede' the currently adopted minerals and waste local plans for the relevant Berkshire authorities.

3.2 Figure 3 shows the documents that make up the Joint Minerals & Waste Plan and the linkages to other development documents.

Figure 3: Development Plan linkages



⁸ National Planning Policy Framework 2012, Paragraph 182 <https://www.gov.uk/guidance/national-planning-policy-framework/plan-making>

How does the Plan relate to other Plans and Strategies?

National Planning Policy

- 3.3 The Joint Minerals & Waste Plan will need to accord with current planning policy and guidance on minerals and waste. The National Planning Policy Framework (NPPF)⁹ was published on 27 March 2012 with the accompanying National Planning Practice Guidance¹⁰ launched in 2014 as a live document, updated as necessary by the Government. The Waste Management Plan for England¹¹ was published in December 2013, followed by the National Planning Policy for Waste¹² which was published in October 2014.
- 3.4 A new 'Duty to Cooperate'¹³ was introduced by the Localism Act and Regulations in 2011 in order to encourage local planning authorities to address issues which have impacts beyond their administrative boundaries. The joint approach being taken by the Central & Eastern Berkshire Authorities recognises that minerals and waste issues require a strategic cross-boundary approach. Beyond this is necessary to demonstrate on-going, constructive, and active engagement with other neighbouring councils and certain organisations that are concerned with sustainable development. In order to demonstrate how this duty has been addressed, a Duty to Cooperate Statement will be published that will show who the authorities have cooperated with, the matters discussed, and when and where meetings have taken place to discuss sustainable development and strategic policies to achieve this. This Statement will be updated throughout the process and will be published alongside the submission version of the Local Plan, and sent to the Secretary of State for consideration through the examination in public process.

Regional Planning Policy

- 3.5 The South East Plan was partially revoked on 25 March 2013. Policy NRM6, which deals with the Thames Basin Heaths Special Protection Area, remains in place as a saved policy¹⁴ and is relevant to the Plan area.

⁹ National Planning Policy Framework (2012) - <https://www.gov.uk/government/publications/national-planning-policy-framework--3>

¹⁰ Planning Practice Guidance - <http://planningguidance.communities.gov.uk/>

¹¹ Waste Management Plan for England - <https://www.gov.uk/government/publications/waste-management-plan-for-england>

¹² National Planning Policy for Waste - <https://www.gov.uk/government/publications/national-planning-policy-for-waste>

¹³ Localism Act 2011 - <http://www.legislation.gov.uk/ukpga/2011/20/section/110/enacted>

¹⁴ Natural Resource Management (NRM6) - <http://www.bracknell-forest.gov.uk/south-east-plan-policy-nrm6.pdf>

Local Planning Policy

- 3.6 The currently adopted minerals and waste plans for the Berkshire area¹⁵, including the Central & Eastern Berkshire Authorities, are the Replacement Minerals Local Plan for Berkshire, adopted in 1995 and subsequently adopted alterations in 1997 and 2001¹⁶ (including Appendices¹⁷ and saved policies¹⁸) and the Waste Local Plan for Berkshire adopted in 1998¹⁹ (including saved policies). The Minerals Local Plan and Waste Local Plan cover the administrative areas covered by the Central & Eastern Berkshire Authorities, as well as Slough Borough Council and West Berkshire Council. While these plans cover the period until 2006, the Secretary of State has directed that a number of policies in them should be saved indefinitely until replaced by national, regional or local minerals and waste policies. For Central & Eastern Berkshire these saved policies will be replaced by the Joint Minerals & Waste Plan, when it is adopted.
- 3.7 A review of the Replacement Minerals Local Plan for Berkshire and the Waste Local Plan for Berkshire was previously being undertaken on behalf of the six Berkshire Unitary Authorities by the Joint Strategic Planning Unit. The Planning Unit published a 'Preferred Options' version of the Joint Minerals and Waste Core Strategy in September 2007 and a Submission Draft version was published in September 2008. The Core Strategy was submitted to the Secretary of State in February 2009. The Minerals and Waste Core Strategy Examination commenced in June 2009. During the hearing concerns were raised regarding the accuracy of the evidence base used to support the waste strategy. As a result of these concerns the Inspector decided to adjourn the Examination and the Secretary of State subsequently formally requested the withdrawal of the Core Strategy in January 2010.
- 3.8 After a review of minerals and waste planning, the Central & Eastern Berkshire Authorities decided to progress with a Joint Minerals & Waste Plan. While the Joint Minerals & Waste Plan does not cover Slough Borough Council²⁰ or West

¹⁵ Minerals and Waste. <http://www.wokingham.gov.uk/planning-and-building-control/planning-policy/minerals-and-waste/>

¹⁶ Replacement Minerals Local Plan for Berkshire 2001 - <http://www.bracknell-forest.gov.uk/replacement-minerals-local-plan-for-berkshire-2001.pdf>

¹⁷ Replacement Minerals Local Plan for Berkshire 2001 Appendices. <http://www.bracknell-forest.gov.uk/replacement-minerals-local-plan-for-berkshire-2001-appendices.pdf>

¹⁸ Mineral Local Plan Saved Policies. <http://www.bracknell-forest.gov.uk/mineral-local-plan-saved-policies-schedule.pdf>

¹⁹ Waste Local Plan for Berkshire. 1998. <http://www.bracknell-forest.gov.uk/waste-local-plan-for-berkshire.pdf>

²⁰ Slough Borough Council minerals and waste policy - <http://www.slough.gov.uk/council/strategies-plans-and-policies/minerals-and-waste.aspx>

Berkshire Council²¹, close coordination of the work between the various Berkshire authorities will continue in order to plan for minerals and waste strategically and address any cross-border issues that may arise.

4. Other plans and strategies

Local plans

4.1 Each of the Central & Eastern Berkshire Authorities will continue to prepare its own Local Plan, which will focus on the areas of planning that are not related to minerals and waste. They include the following:

- Comprehensive Local Plan for Bracknell²²;
- Local Plan Update for Wokingham²³;
- New Local Plan for Reading²⁴; and the
- Borough Local Plan for Windsor and Maidenhead²⁵.

Strategies

4.2 A Statement of Community Involvement (SCI) sets out the approach for involving the community in the preparation, alteration and continuing review of all development plan documents, and in publicising and dealing with planning applications. Each of the Central & Eastern Berkshire Authorities has adopted its own Statement of Community Involvement. They are as follows:

- Bracknell Forest SCI - adopted 2014²⁶;
- Reading SCI - adopted 2014²⁷;
- Windsor and Maidenhead SCI - adopted 2006²⁸; and
- Wokingham SCI - adopted 2014²⁹.

²¹ Emerging West Berkshire Minerals and Waste Local Plan - <http://info.westberks.gov.uk/index.aspx?articleid=29081>

²² Comprehensive Local Plan for Bracknell: <http://www.bracknell-forest.gov.uk/comprehensivelocalplan>

²³ Local Plan Update for Wokingham: <http://www.wokingham.gov.uk/planning-and-building-control/planning-policy/local-plan-update/>

²⁴ New Local Plan for Reading: <http://www.reading.gov.uk/newlocalplan>

²⁵ Borough Local Plan for Windsor and Maidenhead:

https://www3.rbwm.gov.uk/info/200414/local_development_framework/594/emerging_plans_and_policies/2

²⁶ Bracknell Forest Council. Statement of Community Involvement 2014. <http://www.bracknell-forest.gov.uk/statement-of-community-involvement-2014.pdf>

²⁷ Reading Borough Council. Statement of Community Involvement. 2014 <http://www.reading.gov.uk/media/1051/Statement-of-Community-Involvement-Adopted-March-2014/pdf/Statement-Of-Community-Involvement-Mar14.pdf>

²⁸ Royal Borough of Windsor and Maidenhead. Statement of Community Involvement 2006 https://www3.rbwm.gov.uk/downloads/file/512/statement_of_community_involvement_sci_-_adopted_june_2006

²⁹ Wokingham Borough Council. Statement of Community Involvement 2014 <http://www.wokingham.gov.uk/business-and-licensing/licensing-and-trade/licensing-decisions/?assetdet8733745=306132&categoryesctl8379511=5844>

- 4.3 Central & Eastern Berkshire is located within the Thames Valley Berkshire Local Enterprise Partnership (LEP) area. The Thames Valley Berkshire LEP has produced a Strategic Economic Plan³⁰ which outlines the proposed strategic plan for implementing national economic growth and needs to be taken into consideration.

5. Local Plan Assessments

Sustainability Appraisal (incorporating Strategic Environment Assessment)

- 5.1 The policies and proposals in the Joint Minerals & Waste Planning will be assessed to ensure that they contribute to the aims of sustainable development. This assessment will be through Sustainability Appraisal (which incorporates assessment as required under the Strategic Environmental Assessment (SEA) Directive)³¹.
- 5.2 This consultation paper is supported by a Sustainability Appraisal ‘Scoping Report’ which describes the existing key environmental, social and economic issues for Central & Eastern Berkshire and includes a set of sustainability objectives which will be used to assess the policies in documents.
- 5.3 Sustainability Appraisal is run in parallel with the plan-making process and the findings at each stage of the process will inform the plan development.

Habitats Regulation Assessment

- 5.4 The Joint Minerals & Waste Plan will also be subject to Habitats Regulations Assessment under the European directive (92/43/EEC) on the Conservation of Natural Habitats and Wild Flora and Fauna (the Habitats Directive). This is the process that authorities must undertake to consider whether a proposed development plan is likely to have significant effects on a European site designated for its nature conservation interest.

Equalities Impact Assessment

- 5.5 Equalities Impact Assessment will also be undertaken at each stage of the Plan making-process to fulfil the public sector equality duty under the Equality Act 2010³².

³⁰ <http://thamesvalleyberkshire.co.uk/Portals/0/FileStore/StrategicEconomicPlan/TVB%20SEP%20-%20Strategy.pdf>

³¹ The Environmental Assessment of Plans and Programmes Regulations - <http://www.legislation.gov.uk/uksi/2004/1633/contents/made>

³² Equality Act 2010 - <http://www.legislation.gov.uk/ukpga/2010/15/contents>

Local Aggregate Assessment

- 5.6 Paragraph 145³³ of the NPPF states that Mineral Planning Authorities should '*plan for a steady and adequate supply of aggregates*' by amongst other things, preparing a Local Aggregate Assessment (LAA).
- 5.7 The LAA should be produced annually and can be produced jointly with other Mineral Planning Authorities. The Assessment should be '*based on a rolling average of 10 years sales data and other relevant local information*'.
- 5.8 During the preparation of the Joint Minerals & Waste Plan, data will be collated from mineral operators as part of the Aggregate Monitoring (AM) survey. The data informs the Local Aggregate Assessment and is also combined with data from the other South East Mineral Planning Authorities to inform the annual Aggregate Monitoring Report produced by the Technical Secretary of the South East England Aggregate Working Party (SEEAWP).
- 5.9 To-date, the Berkshire Authorities produced a joint LAA which covered all six administrative areas. Whilst West Berkshire Council supported the joint LAA, it has also produced its own LAA to support the production of the West Berkshire Minerals and Waste Development Plan Document.
- 5.10 It is intended that the Central & Eastern Berkshire Authorities continue to produce a joint LAA.

6. Call for Sites

- 6.1 A 'call for sites' exercise was carried out from March 13th 2017 to 5th May 2017 to identify potential mineral and waste sites. This involved invitations of nominations being sent to relevant bodies such as landowners, agents, developers and minerals and waste operators.
- 6.2 Mineral and waste site operators and land owners were asked to put forward site proposals for consideration for minerals and waste uses, including any aspirations for existing sites to either extend or widen the range of operations or facilities.
- 6.3 Mineral uses include;
- Soft sand or sharp sand and gravel;
 - Mineral railheads;
 - Aggregate recycling and secondary aggregate processing facilities.

³³ National Planning Policy Framework. Paragraph 142 to 149: <https://www.gov.uk/guidance/national-planning-policy-framework/13-facilitating-the-sustainable-use-of-minerals>

- 6.4 Waste uses include;
- Waste to energy facilities;
 - Composting facilities;
 - Recycling facilities;
 - Waste transfer sites;
 - Inert landfill (associated with quarry restoration).
- 6.5 Each of the sites nominated will be assessed for its suitability. The methodology for this assessment is set out in the 'Site Assessment Methodology' which accompanies this Consultation Paper. A set of Frequently Asked Questions (FAQs) was also produced and can be viewed on the Central & Eastern Berkshire Authorities webpages³⁴.

7. Minerals and Waste in Central & Eastern Berkshire

Minerals in Central and Eastern Berkshire

- 7.1 Until the 20th Century, chalk and clay were the main minerals produced in the area, generally to meet local needs. Chalk and clay continue to be extracted as a by-product at sand and gravel quarries, but now on a very small scale in comparison to previous times.
- 7.2 The chalk is now mainly used as agricultural lime, and sometimes as 'fill' material for civil engineering projects. The clay was formerly used chiefly for brick and tile making, but today its main use is as part of the lining for waste landfill sites to prevent the spread of pollution and for other engineering applications.
- 7.3 Since the Second World War, the main type of minerals production in Berkshire has been of aggregates for the construction industry, which comprises sands and gravels. Substantial quantities of aggregate minerals are needed for all construction work – in the building or renovation of houses, schools, hospitals, roads and so on.

³⁴ Reading - <http://www.reading.gov.uk/article/10464/The-Central-and-Eastern-Berkshire-Minerals-and-Waste-Plan>

Wokingham - <http://www.wokingham.gov.uk/planning/planning-policy/minerals-and-waste/>

Windsor and Maidenhead -

https://www3.rbwm.gov.uk/info/200414/local_development_framework/594/emerging_plans_and_policies/4

Bracknell Forest - <http://www.bracknell-forest.gov.uk/callforsitesmineralsandwaste2017>

7.4 Quarrying of aggregates in Berkshire has been focussed on the sharp sand and gravel deposits in the Kennet Valley, and between Reading and Newbury. Additionally, there are concentrations of past and active workings in the north and south of Maidenhead and south of Slough. Most aggregate is processed by the operator, either on-site or at central processing facility nearby and sold direct for use in the construction industry.

The importance of planning for aggregates

7.5 The mineral of more than local significance in Central & Eastern Berkshire is sharp sand and gravel. The National Policy Guidance³⁵ outlines how aggregate supply should be managed nationally through the Managed Aggregate Supply System (MASS) which seeks to ensure a steady and adequate supply of mineral whilst taking into account the geographical imbalances and the occurrence of resources. MASS requires mineral planning authorities to make an appropriate contribution nationally as well as locally whilst controlling environmental damage to an acceptable level.

7.6 Owing to the obligations under the NPPF and more specifically MASS, there is a requirement for the Central & Eastern Berkshire Authorities to enable provision of this mineral as best they can.

The role of aggregates in supporting economic growth

7.7 Minerals are an important element both in the national economy and that of the Plan area. Its exploitation can make a significant contribution to economic prosperity and quality of life. The Central & Eastern Berkshire and surrounding areas are subject to major growth pressures. The maintenance of a buoyant economy, the improvement and development of infrastructure and maintenance of the building stock all requires an adequate supply of minerals. Minerals development is therefore a key part of the wider economy.

7.8 The location and type of minerals development can also lead to local economic benefits, through the supply of a local resource to development projects and the provision of local employment. Recycled and secondary aggregates may also provide the economy with a more sustainable and cheaper source of aggregate to support development.

7.9 Mineral production is also influenced by economic factors, in terms of operators wishing to extract mineral resources and market demand. The demand for mineral resources will be determined by the action of the market and macro-

³⁵ <https://www.gov.uk/guidance/minerals> (Paragraph: 060 Reference ID: 27-060-20140306)

economic forces that are beyond the remit of the minerals planning authority to influence.

- 7.10 The performance of the economy is constantly changing, and the activities of the minerals industry could give rise to temporary and reversible effects (in that shortages of local supply could have implications for the timing and cost of physical development, but would be unlikely to prevent it from going ahead altogether).
- 7.11 The aggregates industry is important to the Plan area's economy because of its role alongside the construction sector in enabling the physical development including major infrastructure projects that are vital for economic growth and development. The future implications for the minerals industry of continuing changes in the structure of the economy within Central & Eastern Berkshire include an ongoing need for physical infrastructure, and a need to safeguard the quality of the environment.

Waste in Central and Eastern Berkshire

- 7.12 Waste is produced by households, businesses, industry, construction activities, government and non-government organisations, in different quantities and with different characteristics based on local circumstances. The UK already contains a wide network of waste management facilities, however changes in waste production and efforts to make the best use of the resources contained within waste mean that these facilities and the need for them is continually changing.
- 7.13 Waste Planning Authorities (WPAs) are obliged to prepare Local Plans which identify sufficient opportunities to meet the identified needs of their area for waste management for all waste streams³⁶. By its properties, waste can be classified as non-hazardous, inert and hazardous.
- 7.14 *Non-hazardous* waste is produced mainly from both municipal solid waste (MSW) (sometimes referred to as 'household waste') and commercial & industrial waste (C&I) sources while *inert* wastes derive mainly from construction, demolition and excavation (CD&E) activities. Although a minor contribution to the overall arisings, *hazardous* waste is produced from all three waste sources.
- 7.15 Waste can be managed in different ways, but the waste (management) hierarchy (see Figure 4) is a framework that has become a cornerstone of sustainable waste management, setting out the order in which options for waste

³⁶ National Planning Policy for Waste:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf

management should be considered based on environmental impact (with disposal as the lowest priority). Waste planning has a role to play in driving waste 'up the hierarchy' by ensuring the right amount of appropriate facilities for each part of the hierarchy are planned for in the right place.

Figure 4: The waste management hierarchy



Source: Waste Framework Directive (Directive 2008/98/EC)

7.16 There are around 30 waste management facilities in Central and Eastern Berkshire. However, these do not provide sufficient waste management capacity (i.e. the amount of processing, treatment and handling facilities) for the estimated waste arisings (i.e. waste tonnage produced) in the area. Additionally there are around 20 further waste management facilities in Slough, including an Energy from Waste facility. There are close waste management links between Central & Eastern Berkshire and Slough due to the proximity of their areas and complementary range of facilities. Therefore, to fully consider realistic waste management options it may be necessary to take into account Slough.

The importance of planning for Waste

7.17 If left unmanaged waste can have a number of environmental, amenity and health impacts that are undesirable. Waste also compromises considerable resources, which will have been used when producing the original object. With appropriate technologies, some of these resources can be retrieved and used again, thereby reducing the need for new materials. That is why an array of legislation exists to control how waste is managed and national policy seeks to improve the sustainability of waste management.

7.18 There is a variety of waste management facilities and technologies. Each has different locational requirements and range of potential impacts. The planning regime can manage these impacts, but there can be a conflict between the

need for waste management facilities and in planning terms the suitability of potential sites. Therefore the Joint & Minerals and Waste Plan should not only determine the amount and type of waste management facilities but also the appropriate locational criteria and/or sites.

- 7.19 Ultimately, the role of the Joint Minerals & Waste Plan will be to meet national policy ambitions locally; to deliver sustainable development through driving waste up the “waste hierarchy”, recognise the need for a mix of types and scale of facilities, and make adequate provision for waste management, including disposal.

Issues and Options Consultation

The following section of this consultation paper sets out the proposed Vision, and direction of the Joint Minerals & Waste Plan, and the Issues that have been identified in delivering the proposed Vision. The options for how these issues could be address are posed as questions to which your response would be very welcome.

Instructions on how to respond to this consultation are set out in Section 12 of this Consultation Paper. The supporting document and Response Form can be viewed and downloaded from the consultation web-page [\[add link\]](#)

8. The Vision and strategy for the Central and Eastern Berkshire Authorities Joint Minerals & Waste Plan ('The Plan')

- 8.1 The Joint Minerals & Waste Plan will cover the period up to 2036 in order that it aligns with the Local Plans that the Central & Eastern Berkshire Authorities are producing.

Q. 1

Do you agree with the proposed Plan period up to 2036?

Q. 2

If not, what period do you suggest and why?

- 8.2 The Vision, Strategic Plan Objectives and Spatial Strategy principals have been prepared to be consistent with National Policy principals and fit with the other Local Plans within Central & Eastern Berkshire.

Vision

- 8.3 The plan Vision shapes the overall direction of the Central and Eastern Berkshire Joint Minerals & Waste Plan. The area covered by the plan will continue to experience significant growth in the period up to 2036 and so the Vision must recognise the balance to be struck between making provision for minerals and waste developments to meet future requirements, whilst at the same time ensuring that such developments seek social, environmental and economic gains.
- 8.4 The Vision centres on ensuring a sufficient supply of minerals based on the principles of sustainable development. The Minerals & Waste Plan will strive to ensure that minerals are available at the right time and in the right locations to support levels of growth in terms of new housing, commercial, industrial development and essential infrastructure; and that waste is managed near to

where it is produced in accordance with the waste hierarchy. The Joint Minerals & Waste Plan will seek to provide for future minerals and waste needs; conserve local resources; maximise the recovery of waste; provide local jobs; and protect and improve the environment.

8.5 The following is the proposed Vision for the Joint Minerals & Waste Plan:

Vision for Central & Eastern Berkshire

Recognising the importance of the area as a source of minerals, Central & Eastern Berkshire will aim to maximise the contribution that minerals development can bring to local communities, the economy and the natural environment.

Waste will be managed in a sustainable way, in accordance with the waste hierarchy. The Plan will aim to achieve a state of net self-sufficiency in waste needs. The Plan will also ensure that the full extent of socio, economic and environmental benefits of minerals and waste development are captured, contributing to the area's economic activity and enhancing quality of life and living standards within the area. We will work with partners to take positive action in promoting environmental excellence.

Q. 3

Do you agree with how the Plan direction has been developed?

Q. 4

If not, what factors do you suggest should be taken into consideration?

Q. 5

Do you agree with the proposed Vision?

Q. 6

If not, what changes would you suggest?

Strategic Plan Objectives

8.6 The purpose of the strategic objectives is to assist in the delivery of the Spatial Vision, and facilitate its delivery. The following set of objectives provides the context and overall direction of the Plan. The objectives provide a framework for policy development and each should be considered equally important.

- 1) To strike a balance between the demand for mineral resources, waste treatment and disposal facilities and the need to protect the quality of life for communities, the economy and the quality and diversity of environmental

assets, by protecting the environment and local communities from negative impacts;

- 2) To protect community health, safety and amenity in particular by managing traffic impacts, ensuring sustainable, high quality and sensitive design and layout, sustainable construction methods, good working practices and imposing adequate separation of minerals and waste development from residents by providing appropriate screening and/or landscaping and other environmental protection measures;
- 3) To ensure minerals and waste development makes a positive contribution to the local environment and biodiversity, through the protection and creation of high quality habitats and landscapes that provide opportunities for enhanced biodiversity and geodiversity and contribute to the high quality of life for present and future generations;
- 4) To help mitigate the causes of, and adapt to, climate change by; developing appropriate restoration of mineral workings; prioritising movement of waste up the waste hierarchy; reducing the reliance on landfill; maximising opportunities for the re-use and recycling of waste; and facilitating new technologies to maximise the renewable energy potential of waste as a resource;
- 5) To encourage engagement between developers, site operators and communities so there is an understanding of respective needs. To consider the restoration of mineral sites at the beginning of the proposal to ensure progressive restoration in order to maximise environmental gains and benefits to local communities through appropriate after uses that reflect local circumstance and landscape linkages;
- 6) To support the continued economic growth in Central & Eastern Berkshire, as well as neighbouring economies by helping to deliver an adequate supply of primary minerals and mineral-related products to support new development locally, deliver key infrastructure projects and provide the everyday products;
- 7) To ensure sufficient primary aggregate is supplied to the construction industry from appropriately located and environmentally acceptable sources. To encourage the production and use of good quality secondary and recycled aggregates, having regard to the principles of sustainable development;
- 8) To protect key mineral resources from the unnecessary sterilisation by other forms of development, and safeguarding existing minerals and waste infrastructure, to ensure a steady and adequate supply of minerals and provision of waste management facilities in the future;

- 9) To safeguard facilities for the movement of minerals and waste by rail and encouraging the use of other non-road modes where these are more sustainable;
- 10) To drive waste treatment higher up the waste hierarchy and specifically to increase the re-use, recycling and recovery of materials, whilst minimising the quantities of residual waste requiring final disposal;
- 11) To encourage a zero waste economy whereby landfill is virtually eliminated by providing for more recycling and waste recovery facilities including energy recovery. To aim to be 'net self-sufficient' in waste management facilities in Central & Eastern Berkshire, whilst accepting there will be movements into and out of the area to suitable facilities; and
- 12) To achieve a net reduction in 'waste miles' by delivering adequate capacity for managing waste as near as possible to where it is produced. .

Q. 7

Do you agree with the proposed Strategic Plan Objectives?

Q. 8

If not, what changes would you suggest?

Spatial Strategy

- 8.7 The spatial strategy is informed by the Vision and Strategic Objectives of the Plan. It outlines the spatial approach that the Central & Eastern Berkshire Authorities will take to critical minerals and waste issues. The Central & Eastern Berkshire Authorities have, and will continue to, work collaboratively with other bodies and partners. This will ensure that strategic priorities across local boundaries are, and will continue to be, properly coordinated and clearly reflected in this Plan, any subsequent review of this Plan, and other individual Local Plans.
- 8.8 Central & Eastern Berkshire is characterised by both its urban and rural nature, with the key towns of Reading, Wokingham, Bracknell, Windsor and Maidenhead, alongside large areas of countryside with smaller settlements and villages. It is also crisscrossed by significant transport corridor routes in the form of the M4, A33, A404, A329(M), A322 and the Great Western Mainline rail route from south Wales to London Paddington, and the Reading to London Waterloo line (see Figure 5 in Section 9: Minerals Issues). The unitary authorities of Windsor and Maidenhead, Wokingham and Bracknell Forest are also characterised by a considerable area of Green Belt, which covers the majority of these authorities outside of the existing built up area.

- 8.9 These characteristics continue to be vital building blocks in the areas buoyant economy; they unite the constituent local authority areas and will be a key element of the strategic spatial approach. Accordingly, the delivery of any minerals and waste development in Central & Eastern Berkshire will need to be sympathetic to the existing situation, minimising the impacts of development and maximising the benefits.
- 8.10 Central and Eastern Berkshire is located at the heart of the economic powerhouse of the United Kingdom, prominent within the South East and adjacent to London. As a result, the wider Thames Valley will be subject to major growth pressures on a local and national level throughout the Plan period. Future growth requirements will play a key role in forming impact the spatial strategy for Central & Eastern Berkshire, as well as the wider Thames Valley region. The areas importance is highlighted by its close proximity to two Nationally Significant Infrastructure Projects; the High Speed 2 rail link from London to the North and the recently announced Heathrow Airport expansion plans. These projects significantly increase the regional and national demand for construction aggregates, as well as for construction waste treatment and recycling.
- 8.11 In addition a steady, adequate supply of aggregate will be required to support the drive for increased housebuilding in the area as well as supporting infrastructure such as roads schools and commercial premises. The projects will also impact future requirements for waste management through increased numbers of households and businesses as well as the production of construction wastes.
- 8.12 The Spatial Strategy, in delivering the Vision and Objectives of the Plan, is based on a number of principles. These principles form the basis of sustainable development, and the delivery aspect of the Plan, such as site allocations, must adhere to these principles:
- i. Respond to the needs of communities and the economy by taking decisions that account for future generations, whilst enhancing the quality of life, health and wellbeing and living conditions of today's residents;
 - ii. Promote the careful management of mineral resources;
 - iii. Ensure the efficient use of materials and promote the sustainable use and disposal of resources while mitigating and adapting to climate change;
 - iv. Protect the environment and the character of Central & Eastern Berkshire by maintaining/improving the built and natural environment of the area and mitigating the effect of new development on the environment;
 - v. Maintain the distinct and separate identity of the area's settlements;
 - vi. Maintain and enhance supporting infrastructure, including roads and railways;

- vii. Deliver minerals and waste infrastructure in locations that meet the needs of the community;
- viii. Limit development in those areas at most risk of flooding and pollution;
- ix. Protect the most important areas for biodiversity, landscape and heritage from development;
- x. Ensure good design which is in keeping with the area; and
- xi. Take account of the public's views following consultation and engagement in the context of national planning policies.

Q. 9

Do you agree with the proposed Spatial Strategy content?

Q. 10

If not, what changes would you suggest?

9. Minerals issues

9.1 The minerals issues have been identified through the preparation of the *Minerals: Background Study* which accompanies this Consultation Paper.

ISSUE: Minerals Data

9.2 The Minerals Data that has been gathered as evidence to support the Joint Minerals & Waste Plan comes from a number of different sources, including:

- *National* – National collation of the Aggregate Monitoring surveys
- *Regional* – South East Aggregate Monitoring Reports
- *Local* – Minerals and waste policy documents and Local Aggregate Assessments

9.3 As the Central & Eastern Berkshire Authorities were formerly part of the County of Berkshire, along with Slough Borough Council and West Berkshire Council, much of the historic minerals data is reported on a Berkshire-wide level rather than by each unitary authority. As further information is gathered as part of the Aggregate Monitoring survey, a more detailed understanding of minerals within the area will be compiled.

9.4 There are further issues with the reporting of data in that, due to commercial confidentiality, some data cannot be reported on a unitary authority level. Therefore data is sometimes reported, particularly in relation to South East and National comparisons, on a Berkshire-wide level.

9.5 Whilst Slough and West Berkshire are not within the Plan area, it is necessary to consider cross-boundary relationships under the duty to cooperate and therefore, it is relevant to make some comparisons or report on mineral demands in these locations.

ISSUE: Historic minerals data has, hitherto, been largely collected and published on a Berkshire-wide scale. This has necessitated interpretation and judgement of the information to reach an understanding of the Central & Eastern Berkshire mineral situation.

Q. 11

Can you suggest any other sources of Minerals data for the Central & Eastern Berkshire area?

Q. 12

Do you agree that general trends for the Berkshire-wide level of mineral demand are also likely to apply in Central & Eastern Berkshire?

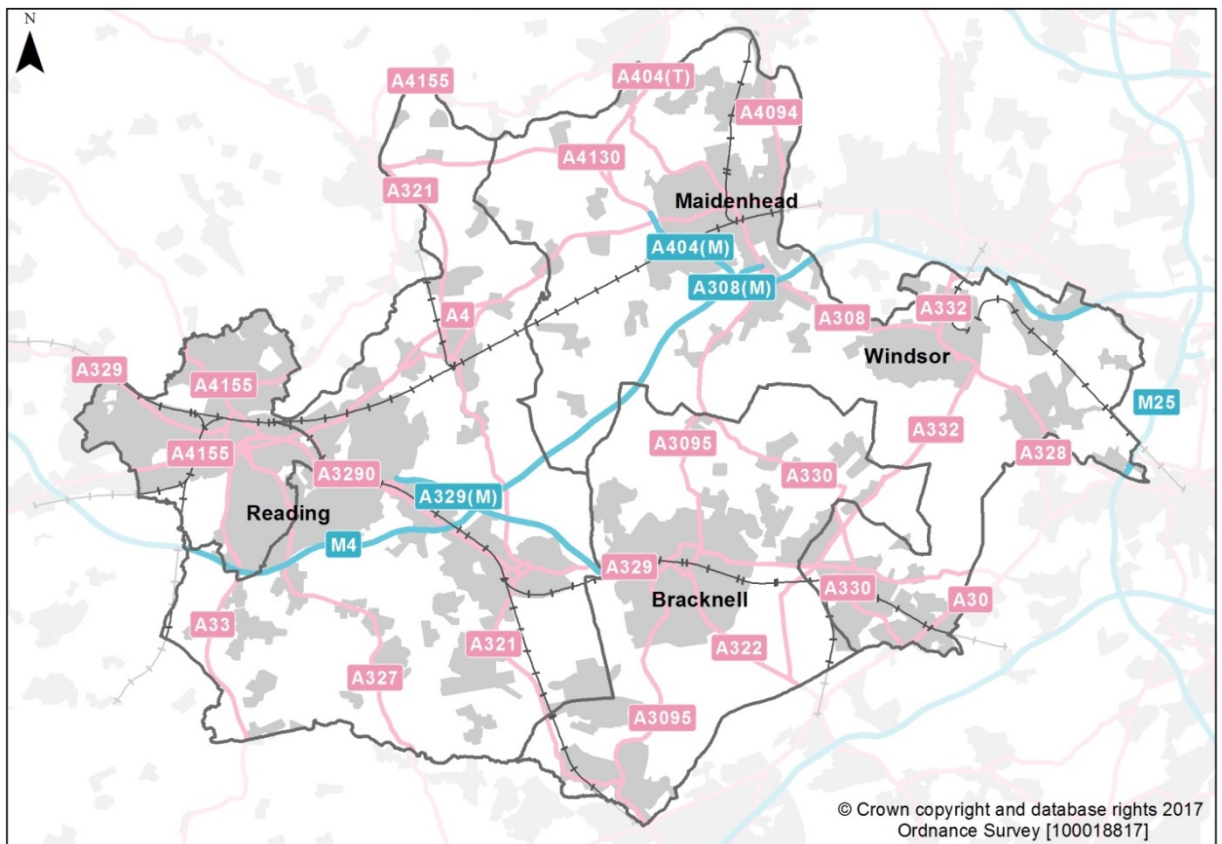
Q. 13

Do you agree that there is sufficient information to support a minerals plan for Central & Eastern Berkshire?

ISSUE: Transportation of minerals

- 9.6 There is a significant road network within Central & Eastern Berkshire, including the strategic routes M4, A308M and A404M, which link with the M25 and A34 as well as other key trunk and A-roads

Figure 5: Strategic Transport Routes



- 9.7 Central & Eastern Berkshire is well connected by rail but does not currently contain any operational rail depots and therefore, is dependent on those located in neighbouring authorities – in particular the rail depots at Theale in West Berkshire and Colnbrook in Slough.
- 9.8 There are no wharves within Central & Eastern Berkshire, and the Kennet & Avon Canal (which joins Newbury and Reading) is not considered to have significant potential for freight movements by the Inland Waterways Association³⁷. It is currently unknown whether the River Thames is suitable for

³⁷IWA Policy on Freight on Inland Waterways (2012): https://www.waterways.org.uk/pdf/freight_policy

freight from Windsor Bridge to Staines Bridge although large barges are able to use this waterway³⁸. However, this may be impacted by the fact that the river is non-tidal from Teddington Lock. Therefore, it is assumed that water transport will not play a role in the provision of mineral or waste management within the Joint Minerals & Waste Plan.

- 9.9 The rail depot at Colnbrook in Slough is currently operational. However, its future operation is affected by the Heathrow Expansion plans. The proposed expansion plans show the new runway to be located over the site of the Lakeside Energy from Waste plant at Colnbrook as well as the rail line to the Colnbrook Aggregate Rail Depot. As there is currently no rail depot within Central & Eastern Berkshire, the area is highly dependent on this facility (as well as the rail depots at Theale, West Berkshire) for crushed rock imports.

ISSUE: The lack of rail depot and water freight capabilities means that all mineral movements within Central & Eastern Berkshire are by road. This also creates a dependency on rail depots in neighbouring authorities.

Q.14

Do you have any information that could help to inform the understanding on mineral movements within Central & Eastern Berkshire, as well as imports/exports of minerals, into and outside of the Plan area?

Q. 15

Do you think potential and practicable rail and water connected sites should be identified within Central & Eastern Berkshire?

Q. 16

Do you know of any such sites within Central & Eastern Berkshire?

Q. 17

If existing rail depots in neighbouring authorities cannot be retained should the Plan encourage their replacement?

ISSUE: Aggregate demand

- 9.10 National economic and construction aggregate forecasts are considered to be useful for providing an overall contextual picture and an indication of anticipated aggregate demand.

³⁸https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/289796/LIT_6689_3e9c5e.pdf

- 9.11 The national forecasts indicate a variety of trends but on the whole one of slow growth. Forecasts have outlined that there is uncertainty over the impact of the United Kingdom leaving the European Union ('Brexit') on the economy and the effect on growth. However, London and the South East are expected to experience continued growth.
- 9.12 The key demand factors are considered to be population and activity in the construction industry. Construction of new homes, offices, industrial and other buildings and associated roads and other infrastructure requires large quantities of aggregates. For example, the Minerals Products Association³⁹ suggests that a house requires 200 tonnes of aggregate, a school may require 15,000 tonnes of concrete and a community hospital may require 53,000 tonnes of concrete. In addition, maintaining and improving the existing built fabric of the area can also require large quantities of aggregate.
- 9.13 The Strategic Housing Market Assessment⁴⁰ concluded that Western Berkshire (which includes Bracknell Forest, Reading and Wokingham) and Eastern Berkshire (including Windsor & Maidenhead and Slough) have an overall objectively assessed need for the following housing levels from 2013-2036:
- Western Berkshire – 2,855 homes per annum.
 - Eastern Berkshire – 2,015 per annum.
- 9.14 The figures take into account demographic projections, migration from London, local economic needs and further adjustments to improve affordability and future household formation rate reductions.
- 9.15 A range of transport infrastructure and commercial development are planned to take place in the next few years which will require aggregates. Crossrail, one of the largest construction projects in recent years, extends well into Central & Eastern Berkshire, with the current terminus planned to be at Reading⁴¹. A programme of improvements to the highway network is planned, many in Wokingham Borough including new distributor roads and park and ride facilities.
- 9.16 A number of town centre developments are either taking place or due to take place in Bracknell Forest, Reading, Maidenhead and Wokingham. Although outside of the Plan area, major developments within Slough will have an impact on the demand of aggregate within Central & Eastern Berkshire.

³⁹ http://www.mineralproducts.org/documents/Mineral_Products_Industry_At_A_Glance_2016.pdf

⁴⁰ <http://info.westberks.gov.uk/CHttpHandler.ashx?id=40949&p=0>

⁴¹ <http://www.crossrail.co.uk/route/maps/route-map>

- 9.17 In addition, social infrastructure projects are being progressed including a replacement high security hospital at Broadmoor, new schools, neighbourhood centres, research parks and sports facilities.
- 9.18 Together these construction projects will require a range of aggregates amounting to on-going demand that will need to be met through the supply of sand and gravel, crushed rock and recycled aggregates in the years ahead.
- 9.19 The major infrastructure projects of HS2 and the third runway proposal at Heathrow, although not within Central & Eastern Berkshire will, if they proceed, be of such a scale that it will impact the wider demand for aggregates in the Thames Valley. The Heathrow proposals are projected to cause a rise in development for off airport ancillary development including hotels, cargo facilities and offices. These will also bolster demand. Although the timeline for these projects may mean that development will extend beyond the plan period, it is important that available resources are safeguarded.

ISSUE: There are a significant number of national and locally significant construction projects within and in proximity to Central & Eastern Berkshire which will require a steady and adequate supply of aggregate over and beyond the plan period. Redevelopment projects will provide a source of recycled aggregate through construction and demolition material.

Q. 18

Do you know of any other local data that should be used to forecast local demand for aggregate?

Q. 19

Do you agree that the demand information suggests that there will be a continued and possible increase in minerals demand in the near future or later in the plan period?

ISSUE: Aggregate supply

- 9.20 An adequate and steady supply of construction aggregate is required to ensure that market needs in Central & Eastern Berkshire are met in order to support continued economic development and prosperity. Aggregates are needed to help construct infrastructure, buildings and goods that society, industry and the economy needs. The aggregate required can be made up of different sources such as recycled materials, imported mineral products or extracted sand and gravel from either the sea or land.
- 9.21 Sales of all these various aggregates in the Berkshire county area arise from extraction (land-won), imports (crushed rock and marine-won sand and gravel)

or processing (recycled aggregate). Sales figures are monitored annually by mineral planning authorities and provide a basis for estimating the needs and requirements of Central & Eastern Berkshire.

9.22 Sales data is usefully compared with that on past aggregate consumption. Aggregate consumption figures can be calculated from data published by the Department for Communities and Local Government (DCLG) every four years as part of the Aggregate Monitoring (AM) survey undertaken by the BGS. Recycled and secondary aggregate figures are not available from the AM survey.

Table 2: Total sales, exports and imports and consumption of Primary Aggregate in Berkshire, 2009 and 2014

Aggregate	2009					2014				
	Sales		Consumption		A as % B	Sales		Consumption		A as % B
	(A)	(B)	(A)	(B)		(A)	(B)			
'000 tonnes	%	'000 tonnes	%		'000 tonnes	%	'000 tonnes	%		
Land-won sand and gravel	840	100%	807	45%	104%	1,051	100%	601	31%	174%
Marine-won sand and gravel	-	-	98	6%	n/a	-	-	152	8%	n/a
Crushed rock	-	-	875	49%	n/a	-	-	1,161	61%	n/a
Total	840	100%	1,780	100%	47%	1,051	100%	1,913	100%	56%

9.23 The comparison of 2009⁴² and 2014⁴³ data in Table 2 shows a trend for a reduction in consumption of land-won sand and gravel but an increase in sales. Consumption of marine-won sand and gravel and crushed rock have also increased – both of which are imported aggregates. This shows an overall increase in supply of aggregate in Berkshire. It is assumed that this reflects the situation in Central & Eastern Berkshire.

⁴² Collation of the results of the 2009 Aggregate Minerals survey for England and Wales: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6366/1909597.pdf

⁴³ Collation of the results of the 2014 Aggregate Minerals survey for England and Wales: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/563423/Aggregate_Minerals_Survey_England_Wales_2014.pdf. The 2014 survey was delayed due to DCLG funding reviews.

ISSUE: Both marine-won sand and gravel and crushed rock, which are both imported into Berkshire, are likely to continue to increase in importance in aggregate supply for Central & Eastern Berkshire.

Q. 20

Do you think it is fair to assume that the trends of increasing dependence of imported aggregate in Berkshire is reflected in Central & Eastern Berkshire?

Q. 21

If not, what information do you have that would support this?

Q. 22

Do you agree that the trend for increasing consumption of crushed rock and marine sand and gravel, heighten the dependence of Central & Eastern Berkshire on the rail depots in neighbouring authorities?

ISSUE: Recycled and secondary aggregate

- 9.24 Recycled aggregates are those derived from construction, demolition and excavation activities that have been reprocessed to provide materials or a product suitable for use within the construction industry. It includes materials such as concrete, brick or asphalt that would otherwise be disposed of.
- 9.25 Secondary aggregates are usually by-products of industrial processes. For example, the production of Incinerator Bottom Ash at energy recovery facilities, a by-product of the incineration process, can be used as a secondary aggregate for road construction. Additional secondary aggregate includes spent railway ballast, glass, plastics and rubber (tyres).
- 9.26 Highway maintenance work has the potential to comprise a relatively large source of recycled aggregate through recycled road planings, asphalt, concrete kerbs and soils.
- 9.27 Some recycled aggregate is processed on development and construction sites, but an increasingly large amount is processed at free standing sites or sites located within existing minerals and waste activities such as quarries, waste transfer, materials recovery and land-filling.
- 9.28 There is no secondary aggregate produced within Central & Eastern Berkshire. The only secondary aggregate produced within the wider Berkshire area is the bottom ash produced by Lakeside Energy from Waste plant. Approximately 16,000 tonnes was produced between 2009 and 2010.

- 9.29 The use of recycled and secondary aggregates provides an opportunity to reduce dependence on land-won aggregate sand and gravel extraction in Central & Eastern Berkshire. Its use can be as a substitute for primary aggregate, providing a more sustainable source of supply. These have combined benefits, by not only reducing the need for land won (or marine aggregate), but also reducing the amount of waste requiring disposal by landfill.
- 9.30 Reducing the demand for primary aggregate such as sand and gravel can be encouraged by increasing the use of recycled and secondary aggregate.
- 9.31 There is no comprehensive data on production or use of recycled aggregates. Historically, production and sales of recycled and secondary aggregate have been recorded on a Berkshire-wide level. The response level to the Aggregate Monitoring surveys has also been incomplete.
- 9.32 Sales for Central & Eastern Berkshire for 2014 and 2015 cannot be reported as the returns received are from only two operators. However, the responses show a decline trend in sales of recycled aggregate from 2013 to 2015 within Central & Eastern Berkshire.
- 9.33 The South East Aggregate Monitoring Report 2014 & 2015⁴⁴ also shows a decline in recycled and secondary aggregate sales for the Berkshire unitary authorities from 408 to 400 thousand tonnes.
- 9.34 An assessment using the Environment Agency's Waste Data Interrogator suggests that Central & Eastern Berkshire is exporting construction and demolition waste for processing outside of the Plan area. This supports West Berkshire's Draft 2016 Local Aggregate Assessment which states that they were importing construction and demolition waste and key sources of material were Reading and Wokingham.
- 9.35 Supplies of recycled aggregate vary according to the level of local activity in the construction industry. During the regeneration of Bracknell Town Centre, the material resulting from the demolition of buildings was crushed and re-used on the site.
- 9.36 The Mineral Products Association reports that the use of recycled and secondary materials in the Great Britain aggregates market has increased rapidly, rising from 30 million tonnes per annum (mtpa) in 1990 to 63 mtpa in 2015. Although the amount had fallen in 2013 to 56 mtpa, the proportion of

⁴⁴ South East Aggregate Monitoring Report 2014 and 2015: <http://www.hwa.uk.com/site/wp-content/uploads/2015/12/SEAWP-16-03-AM-Report-2014-15-Final-2.pdf>

total aggregates supplied from recycled and secondary sources has risen from 10% in 1990 to 28% in 2015⁴⁵.

ISSUE: The use of recycled and secondary aggregate is increasing nationally. There is significant amount of development and redevelopment planned within the Plan area which can be both a source and a market for the material.

Q. 23

Are you aware of any other sources of information on aggregate recycled or secondary aggregate data which can be reported on?

Q. 24

Do you agree with the assumption that Central & Eastern Berkshire is exporting some of its construction and demolition waste outside of the Plan area, potentially to West Berkshire, for processing?

Q. 25

Do you agree that Central & Eastern Berkshire should be more self-sufficient in its processing of construction and demolition waste within the Plan area?

ISSUE: Crushed rock

9.37 The geology of Central & Eastern Berkshire means that it does not have its own source of crushed and hard rock minerals such as limestone. Therefore, those minerals that cannot be derived from within the Plan area have to be imported by rail and road in order meet local needs.

9.38 The movement and consumption of crushed rock is tracked in the four yearly Aggregate Minerals (AM) survey. The latest available surveys are 2009 and 2014. The data is also reported on a Berkshire-wide basis rather than to unitary-level. The survey findings show that the most significant source of crushed rock is supplied from Somerset and that all of the crushed rock imported into Berkshire is then consumed within Berkshire, rather than exported to other areas.

ISSUE: Central & Eastern Berkshire is reliant on the importation of crushed rock from Somerset via the rail depots in West Berkshire and Slough.

Q. 26

Do you agree with the assumption that the crushed rock supplied to Central & Eastern Berkshire is sourced from Somerset via the rail depots at Theale?

⁴⁵ http://www.mineralproducts.org/documents/Mineral_Products_Industry_At_A_Glance_2016.pdf

Q. 27

Do you agree that the consumption of crushed rock within the Berkshire area demonstrates the dependence of Central & Eastern Berkshire on the rail depots in neighbouring areas as sources of supply?

ISSUE: Marine-won sand and gravel

- 9.39 The importation and consumption of marine-won sand and gravel is only reported on a Berkshire-wide level. Berkshire's level of imported marine sand represented 5.5% of the total primary aggregated consumed in 2009 and this rose to approximately 8% in 2014⁴⁶. Imports into Berkshire in 2009 were 98 thousand tonnes which equated to nearly 8% of the total primary aggregates. This rose to 9% in 2014 with 152 thousand tonnes of imported marine aggregate.
- 9.40 The main source of material is from Greater London which suggests that this is marine dredged material that has been landed at London wharves. Due to the distance travelled it is assumed that this has been imported by rail. The second greatest source is Hampshire. This is material that will have been landed at Hampshire's wharves. It is likely that this material will have travelled into Berkshire by road but it is also possible that the mineral was transported via the rail depots in Hampshire to the depots at Theale or Colnbrook.
- 9.41 There is no evidence to suggest that marine sand and gravel imports are likely to cease but the current figures show a marginal increase in their role in total primary aggregate supply.

ISSUE: Marine sand and gravel forms part of the aggregate supply provision for Central & Eastern Berkshire. It is likely that this material is being supplied by road from Hampshire's wharves and via the rail depots in West Berkshire and Slough from London's wharves.

Q. 28

Do you agree with the assumption that the marine-won sand and gravel forms a small but important part of the aggregate supply to Central & Eastern Berkshire?

Q. 29

Do you agree with the assumption that marine-won sand and gravel from Hampshire is being transported by road and via rail from London's wharves?

⁴⁶ Collation of the results of the 2014 Aggregate Minerals Survey for England and Wales:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/563423/Aggregate_Minerals_Survey_England_Wales_2014.pdf

Q. 30

Do you agree that the import of marine aggregates to Central & Eastern Berkshire justifies support for safeguarding wharves in supply locations such as Hampshire and London?

ISSUE: Sand and gravel markets

- 9.42 The main economic mineral deposit worked from the land within Central & Eastern Berkshire is sand and gravel.
- 9.43 Sand and gravel is important to the continued economic prosperity of Central & Eastern Berkshire and the wider Thames Valley. Locally produced sand and gravel is an essential element to overall aggregate supply.
- 9.44 Uses of sand and gravel across Central & Eastern Berkshire may include its general application as an aggregate, as a material to make concrete, concrete products or cement, in other building material uses as a constructional base material or fill. Unwashed or as-raised sand and gravel is commonly used as construction fill material and also helps for resurfacing tracks and paths. This material is often referred to as 'hoggin' and contains the clay content which helps act as a binding agent.
- 9.45 Sand and gravel may also have a number of other uses such as roofing shingles, on icy roads in the winter, for glass making, for railroad ballast, for water filtration and for household gardening.
- 9.46 'Soft sand' is an important mineral resource with specific applications; such as asphalt, mortars, plaster and top dressing, all of which sharp sand and gravel and other aggregate materials are unsuitable.
- 9.47 Patterns of sand and gravel supply largely reflect the location of mineral resources. It can be assumed that the markets for sand and gravel generally support the major towns within Central & Eastern Berkshire as well as other parts of the Thames Valley such as Slough.

ISSUE: The principle market for sand and gravel produced in Central & Eastern Berkshire is likely its urban areas and those in neighbouring parts of the Thames Valley.

Q. 31

Do you agree that the main markets for sand and gravel are within Central & Eastern Berkshire and neighbouring areas of the Thames Valley?

ISSUE: Extraction locations

- 9.48 Historically, the quarrying of sand and gravel in Central & Eastern Berkshire has been focussed on the Kennet valley, and between Reading and Newbury. In addition, there have been concentrations of workings north and south of Maidenhead, and south of Slough.
- 9.49 In the last 10 years, the only operational sand and gravel sites have been located in Windsor & Maidenhead and Wokingham Boroughs.
- 9.50 Star Works is the only permitted soft sand quarry but is inactive. It lies within the Green Belt and retains approved reserves.

ISSUE: There is only one permitted soft sand site within Central & Eastern Berkshire and this is currently inactive, so this material is likely to be sourced elsewhere.

Q. 32

Do you agree that the supply of soft sand to Central & Eastern Berkshire is being sourced from outside of the Plan area?

Q. 33

Are you aware of any reasons for soft sand proposals not coming forward?

Q. 34

Are you aware of any potential soft sand sites?

- 9.51 Poyle Quarry, located in Windsor & Maidenhead, hasn't been worked for approximately 10 years. The planning permission at this quarry expired in December 2015.
- 9.52 In August 2015, planning permission was granted for a quarry at Datchet's Riding Court Farm. The quarry, to be operated by CEMEX, is ready to commence production.
- 9.53 Extraction sites have not been operational within the administrative area of Slough Borough Council for 10 years.
- 9.54 A number of permitted sites are located in the Green Belt.

9.55 The responses from the Aggregate Monitoring survey for 2015 suggested that the permitted reserves in Central & Eastern Berkshire at 31 December 2015 were 6,864,000 tonnes⁴⁷.

ISSUE: There are approximately seven million tonnes of permitted reserves within Central & Eastern Berkshire. There have been no operational sites within the Borough of Slough for 10 years which means they have been dependent on alternative sources of supply.

Q. 35

Do you agree with the assumption that Central & Eastern Berkshire is likely to be supplying Slough with aggregate?

Q. 36

Are you aware of any factors which may affect the estimated seven million tonnes of reserves at operational sites within Central & Eastern Berkshire?

ISSUE: Sand and gravel resources

9.56 Sand and gravel reserves data for Central & Eastern Berkshire is complicated due to historic reporting at a Berkshire-wide level but due to geology and presence of environmental constraints, it is likely that the main resources of sand and gravel and soft sand are within Windsor & Maidenhead and Wokingham Borough.

9.57 Other potential sites include those identified in the Replacement Minerals Local Plan for Berkshire⁴⁸ which includes 13 'Preferred Areas'. Seven of the Preferred Areas are located in West Berkshire. The remaining areas are located in Reading, Windsor & Maidenhead and Slough. One of the Preferred Areas – Riding Court Farm, Datchet (Preferred Area 11) – has recently been permitted with reserves of 2.1 million tonnes⁴⁹.

9.58 The estimated yield (excluding Riding Court Farm) of the remaining Preferred Areas is 1,655,000 tonnes. However, this includes Preferred Areas remaining in Slough. If these Preferred Areas are excluded, the estimated yield is 375,000 tonnes.

⁴⁷ Aggregate Monitoring (AM) 2015 survey results.

⁴⁸ Replacement Minerals Local Plan for Berkshire (incorporating the Alterations adopted in December 1997 and May 2001 (joint Strategic Planning Unit) [<http://www.bracknell-forest.gov.uk/replacement-minerals-local-plan-for-berkshire-2001.pdf>]

⁴⁹ This is greater than the estimate of 1,750,000 tonnes in the Replacement Minerals Plan.

ISSUE: There are approximately 7 million tonnes of permitted reserves within Central & Eastern Berkshire. Other potential reserves are likely to be identified within Wokingham and Windsor & Maidenhead Boroughs. There are also reserves in Preferred Areas but some of these are located within Slough Borough Council's administrative area.

Q. 37

Do you agree that potential resources of sand and gravel and soft sand remain within Windsor & Maidenhead and Wokingham Boroughs'?

Q. 38

Do you think the resources in Preferred Areas in Slough should be taken account of when considering potential resources to supply Central & Eastern Berkshire?

ISSUE: Sand and gravel imports / exports

- 9.59 The market dictates that sand and gravel will be obtained from the cheapest location for that particular material, and mineral planning authority boundaries do not influence the movement of minerals. Where the demand in Central & Eastern Berkshire can be satisfied most efficiently and cost effectively from locations in other areas, such as West Berkshire, Hampshire, Oxfordshire or Buckinghamshire, then it will. This may be due to the specific type or quality that is required only being available in a neighbouring mineral planning authority area, or simply due to the fact that the point of demand is closer to the point of supply somewhere other than in Central & Eastern Berkshire.
- 9.60 Import and export information is only reported on a Berkshire-wide level and every four years. In 2009 and potentially to a greater extent in 2014, the Berkshire Authorities were just over half of the sand and gravel consumed and the rest were imported from a range of sources. The largest was Hampshire which has been supplying an increased amount and in 2014 supplied between 10% to 20% of the land-won sand and gravel consumed.
- 9.61 Of the aggregates sold in Berkshire in 2009, 61% was consumed in Berkshire with the remainder being exported, principally to destinations in the South East. This scenario switches in 2014 with only 24% being consumed within Berkshire and 52% is exported to destinations in the South East.
- 9.62 It is likely that imports and exports of land-won sand and gravel are transported by road.

ISSUE: Approximately half of the land-won sand and gravel consumed within Berkshire is sourced from within Berkshire and imports by road from Hampshire are an important alternative source.

Q. 39

Do you agree that the main supplies of sand and gravel used in the area are from within Berkshire and Hampshire?

Q. 40

If not, do you have any evidence to support this?

Q. 41

Do you agree with the assumption that a decline in exports reflects the development demand pressures within the area?

Q. 42

Do you agree with the assumption that imports and exports of sand and gravel are transported by road?

ISSUE: Past sand and gravel sales

9.63 Berkshire has both sharp sand and gravel deposits and deposits of soft sand. Historically, sales data has been recorded on a Berkshire-wide basis. In order to determine what proportion of the sales apply to Central & Eastern Berkshire, sales of West Berkshire are deducted from the total sales, and the remainder is then assumed to be sales from Central & Eastern Berkshire as Slough has not contained any operational sites for the last 10 years.

9.64 West Berkshire's Draft LAA for 2015⁵⁰ outlines its assumed construction aggregate outputs from 2006 to 2015. This has been based on Aggregate Monitoring data and local sources such as planning applications, site visits and letters from operators etcetera.

ISSUE: West Berkshire has collated the most reliable source of data on sales figures and contribution to the Berkshire total sales figures and therefore, Central & Eastern Berkshire will also use these figures.

Q. 43

Do you have any available data that could be used to inform the sales information for Central & Eastern Berkshire?

⁵⁰ West Berkshire Local Aggregate Assessment 2015:
<http://info.westberks.gov.uk/CHttpHandler.ashx?id=40757&p=0>

9.65 Table 3 below outlines the combined sales of sand and gravel for Berkshire, the output from West Berkshire and the remaining sales data which is the assumed output of the sites within Central & Eastern Berkshire.

Table 3: Comparison of Berkshire's Total Sales of Sand and Gravel and West Berkshire's Output 2006- 2015 (thousand tonnes)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Berkshire (Total)	645	615	755	840	886	1,127	865	792	1,080	902
West Berkshire (Output)	525	593	493	390	275	275	234	202	200	154
Central & Eastern Berkshire	120	23	263	450	611	852	631	590	920	748

Source: Berkshire LAA 2014 and 2015, West Berkshire LAA 2016.

9.66 Based on the information in the LAAs, the 10 year average sales for Central & Eastern Berkshire is **520,761 tonnes per annum**.

9.67 In addition, NPPG⁵¹, recommends assessing the three year average of sales to identify if there is a trend of increased demand which may indicate that it may be more appropriate to increase supply. The three year average of the sand and gravel sales in Central & Eastern Berkshire is **752,765 tonnes per annum** which is an increase of 232,004 tonnes per annum.

9.68 Based on the future aggregate demand information, the three year average figure which shows an increase from the 10-year average is likely to reflect the future aggregate demand for Central & Eastern Berkshire as well as the wider Thames Valley.

ISSUE: Based on the future aggregate demand information, the three year average figure of 752,765 tonnes per annum is likely to reflect the future aggregate demand for Central & Eastern Berkshire as well as the wider Thames Valley.

Q. 44

Do you agree that the three-year average is a true reflection of demand for Central & Eastern Berkshire?

Q. 45

If not, what level of demand do you think is appropriate to forecast future demand and what evidence do you have to support this?

⁵¹ <https://www.gov.uk/guidance/minerals> Paragraph: 064 Reference ID: 27-064-20140306

ISSUE: Soft sand

- 9.69 There is not an active soft sand quarry within Central & Eastern Berkshire, although there is one permitted (Star Works) which has not been operational since 2006.
- 9.70 Therefore, the sales estimated for Central & Eastern Berkshire are for sharp sand and gravel only. It is assumed that soft sand has been provided to Central & Eastern Berkshire from other sources.

ISSUE: There is currently no soft sand produced in Central & Eastern Berkshire and soft sand is being imported.

Q. 46

Due to the lack of soft sand sales from quarries within Central & Eastern Berkshire what do you estimate is the level of demand for soft sand in the area and what evidence do you have to support this?

Q. 47

Do you think that Central & Eastern Berkshire should continue to rely solely on imports of soft sand?

Q. 48

If not, what measures can be used to encourage soft sand proposals to come forward?

ISSUE: Landbank

- 9.71 The landbank is a measure of the permitted reserves of mineral expressed in the number of years that the reserves would provide production for at the apportionment or other given rate. It is a theoretical measure of the life of the combined reserves assuming that they can be worked at a consistent rate across the period. In practice reserves will be unevenly distributed between quarries and some quarries will exhaust reserves before others. A large amount of reserve in a quarry with only a low production rate is notably less available to the landbank than equivalent reserves in a high producing quarry.
- 9.72 The NPPF⁵² requires Mineral Planning Authorities to make provision for the maintenance of a landbank of at least seven years for sand and gravel. The estimated reserves of sand and gravel from sites with planning permission for extraction (permitted reserves) at 31 December 2015 were 6,864,000 tonnes.

⁵² National Planning Policy Framework, Section 13: <https://www.gov.uk/guidance/national-planning-policy-framework/13-facilitating-the-sustainable-use-of-minerals>

- 9.73 At the end of December 2015, Star Works Quarry in Wokingham Borough had a reserve at the end of December 2015 of 196,000 tonnes of soft sand. However, because this inactive quarry would need to discharge working conditions before extraction can proceed, it cannot be included in the total permitted reserves.
- 9.74 Therefore, the total permitted reserves are 6,668,000 tonnes. Based on the 10 year average sales of 520,761, the landbank for sand and gravel sites within Central & Eastern Berkshire is **12.8 years**. However, based on the three-year average, the landbank reduces to **8.8 years**.
- 9.75 The NPPF requires Mineral Planning Authorities in planning for a steady and adequate supply of aggregates to (inter alia) ensure that large landbanks bound up in very few sites do not stifle competition. One quarry in Central & Eastern Berkshire contains approximately a half of the total reserves, but its sales are only a small proportion of total sales. However, recent surveys suggest that sales are increasing indicating that there is competition in the market.
- 9.76 Riding Court Farm has a large reserve but has not yet started operating at the time of the last Aggregate Monitoring survey and therefore, has not been included in the figures. This, together with the position that some other quarries have less than two years' operating life remaining, means that the calculation of the landbank is not necessarily an accurate reflection of the ability of the quarries collectively to supply the construction industry in the following seven years.

ISSUE: The landbank based on three year sales for sand and gravel in Central & Eastern Berkshire is 8.8 years.

Q. 49

Do you agree that the landbank of 8.8 years for Central & Eastern Berkshire is a more accurate reflection of supply?

Q. 50

If not, what factors/information influence you position?

ISSUE: Future sand and gravel provision

- 9.77 The Proposed Plan period is up to 2036. If the 10 year average of sales is 520,761 and is projected forward from 2015 to 2026 on this basis, a total of **10,935,981 tonnes** would be required over full plan period. However, if the three year average is used, this increases to **15,808,065 tonnes**.

9.78 The current permitted reserves for Central & Eastern Berkshire are 6,668,000 tonnes (not including Star Works Quarry). This means that there is an additional requirement for between 4,267,981 (10 years) and 9,140,065 (three year) tonnes of sand and gravel.

ISSUE: There is a requirement for additional reserves of between 4,267,981 and 9,140,065 tonnes of sand and gravel during the Plan period.

Q. 51

Do you agree that the Central & Eastern Berkshire Authorities should plan for an additional requirement of 9 million tonnes of sand and gravel?

Q. 52

If not, what is the evidence to support this?

9.79 There is a number of remaining Preferred Areas from the Replacement Minerals Local Plan for Berkshire⁵³. A number of these are located within West Berkshire, but others are located within Central & Eastern Berkshire and Slough. Having been identified in the plan for many years and not having come forward, there is no certainty that these sites would ever be worked.

9.80 Should all the remaining Preferred Areas come forward for development, the total tonnage would be 1,655,000 tonnes (although this includes the Preferred Areas within Slough). This would not meet the future demand for Central & Eastern Berkshire based on the 10-year average or the three year average.

9.81 The Central & Eastern Berkshire Authorities have undertaken a 'call for sites' to landowners, agents and mineral operators to nominate potential minerals sites. The outcome of this exercise is currently unknown but it could lead to sites which could be allocated to meet the future demand.

ISSUE: The existing Preferred Areas from the saved Replacement Minerals Local Plan do not fully meet the future demand and some of the sites are located outside of the Plan area.

Q. 53

Do you agree that all the remaining Preferred Areas are reconsidered for inclusion in the Joint Minerals & Waste Plan?

⁵³ Replacement Minerals Local Plan for Berkshire. 2001: <http://www.bracknell-forest.gov.uk/replacement-minerals-local-plan-for-berkshire-2001.pdf>

Q. 54

Do you have any information regarding the remaining Preferred Areas which may impact their inclusion?

Q. 55

Are you aware of any sand and gravel sites that could be proposed for extraction?

ISSUE: Mineral safeguarding

9.82 Mineral Safeguarding Areas are areas of proven mineral deposits which are protected from development that might needlessly sterilise these resources. There is no presumption that safeguarded mineral deposits will actually be worked. But in the event a development is proposed that might prevent future mineral extraction, due consideration would be given to protecting the resource or prior extraction (removal of some of the resource prior to development taking place).

ISSUE: It is considered necessary to safeguard proven mineral deposits of sharp sand and gravel and soft sand to prevent sterilisation and retain resources to meet longer term need.

Q. 56

Do you agree that only mineral deposits of sharp sand and gravel and soft sand are safeguarded within Mineral Safeguarding Areas?

Q. 57

If not, what other minerals should be included and why?

ISSUE: Clay

9.83 In the past, Berkshire had numerous small workings for clay for making bricks and tiles, but the mass production of bricks at much larger brickworks elsewhere in the region, and the more general use of concrete tiles, has led to the closure of all the brick and tile works within the Berkshire area.

9.84 The last remaining brick and tile works was located at Knowl Hill, between Reading and Maidenhead. Although the site contains extensive permitted reserves of clay, the manufacture of bricks and tiles ceased during the 1990s. The site is now principally used as a landfill (Star Works).

9.85 Some clay is dug intermittently from deposits near Reading and elsewhere for use as bulk fill or for sealing sites which are to be filled with putrescible waste.

These are generally 'one-off' operations, and there appears to be no demand for claypits to be established to serve these markets on a long term.

- 9.86 There have not been any operational claypits permitted to support industrial processes for over 10 years.
- 9.87 Due to the current lack of brick and tileworks within Central & Eastern Berkshire, there is no requirement to make 25 years provision of brick-making clay as outlined in the NPPF⁵⁴.

ISSUE: There is no current industrial demand for clay in the area and other demands are low.

Q. 58

Do you agree that it is not necessary to safeguard clay resources because current industrial demand by brick and tiles works is low in this area?

Q. 59

If not, what evidence do you have to support this?

Q. 60

Do you agree that it is not necessary to allocate clay extraction sites?

Q. 61

If not, what evidence do you have to support this?

Q. 62

Do you agree that future clay proposals can be judged against a criteria-based policy?

ISSUE: Chalk

- 9.88 In Berkshire, chalk was of some local importance. The use of chalk for agricultural purposes dates back to Roman times.
- 9.89 The continuing demand for chalk as agricultural lime is very low. The last active chalk pit in Berkshire, at Pinkneys Green (Hindhay Quarry) near Maidenhead, is currently being restored. Some of the chalk from this pit was also used as bulk fill.
- 9.90 In recent years, chalk extracted in Central & Eastern Berkshire has only been used in the production of agricultural lime rather than to supply a processing

⁵⁴ National Planning Policy Framework. Section 13: <https://www.gov.uk/guidance/national-planning-policy-framework/13-facilitating-the-sustainable-use-of-minerals>

plant. Therefore, there is no requirement to make 15 years provision of chalk (as cement primary) as outlined in the NPPF⁵⁵.

- 9.91 As such no allocations for chalk extraction are required to support the Joint Minerals & Waste Plan, and any future proposals can be determined using a general policy such as that outlined in the existing Replacement Plan and the withdrawn Core Strategy.
- 9.92 Given the supply and demand of chalk, it is not considered necessary to safeguard chalk by defining safeguarding areas.

ISSUE: There is a low level of demand for chalk in Central & Eastern Berkshire.

Q. 63

Do you agree that it is not necessary to safeguard chalk resources?

Q. 64

If not, what evidence do you have to support this?

Q. 65

Do you agree that it is not necessary to allocate chalk extraction sites?

Q. 66

If not, what evidence do you have to support this?

Q. 67

Do you agree that future chalk proposals can be judged against a criteria-based policy?

ISSUE: Oil and gas

- 9.93 Oil and gas are nationally important mineral resources and it is government policy that exploration should be supported and resources exploited subject to environmental considerations.
- 9.94 Oil and gas resources are classed as either 'conventional' or 'unconventional'. Conventional resources (as known as 'hydrocarbons') are situated in relatively porous sandstone or limestone rock formations. Unconventional sources are found where oil and gas has become trapped within the shale rock itself and did not form traditional conventional reservoirs.
- 9.95 As shale is less permeable (or easily penetrated by liquids or gases), it requires a lot more effort to extract the hydrocarbons from the rock. However, recent

⁵⁵ National Planning Policy Framework. Section 13: <https://www.gov.uk/guidance/national-planning-policy-framework/13-facilitating-the-sustainable-use-of-minerals>

technological advancements have resulted in horizontal drilling which has made tapping into shale deposits more financially viable.

- 9.96 Hydraulic fracturing (sometimes referred to as 'fracking') is a technique used in the extraction of oil or gas from 'shale' rock formations by injecting water at high pressure. This process has caused some controversy, however the Government's position is that there is a pressing need to establish (through exploratory drilling) whether or not there are sufficient recoverable quantities of unconventional oil and gas present to facilitate economically viable full scale production.
- 9.97 There are no known commercial resources of oil and gas in Central & Eastern Berkshire, although viable conventional resources of oil and gas have been identified and are being exploited in neighbouring counties, such as Hampshire.
- 9.98 Oil and Gas licences granted by the Oil and Gas Authority⁵⁶ confer rights for persons to search for, bore and produce petroleum resources. Oil and gas activity comprises a number of different stages including the exploration of oil and gas prospects, appraisal of any oil and gas found, production and distribution. The production and distribution of oil and gas usually involves the location of gathering stations which are used to process the oil and gas extracted. All stages require planning permission from the relevant mineral planning authority. The development of gathering stations requires more rigorous examination of potential impacts than exploration or appraisal.
- 9.99 There are currently no licence areas within Central & Eastern Berkshire. A former licence area within Windsor (PEDL 236) was relinquished in 2014⁵⁷.
- 9.100 There have also been two exploratory wells within the Central & Eastern Berkshire area but these were completed in 1966 and 1974 respectively⁵⁸. It is assumed that the exploration concluded that the wells were not commercially viable.

ISSUE: There are currently no known commercially viable resources of oil and gas in Central & Eastern Berkshire and no existing licence areas.

Q. 68

Do you agree there are currently no known commercially viable resources of oil and gas in Central & Eastern Berkshire?

⁵⁶ OGA: www.gov.uk/government/organisations/oil-and-gas-authority

⁵⁷ <https://www.ogauthority.co.uk/data-centre/data-downloads-and-publications/licence-data/>

⁵⁸ <https://www.ogauthority.co.uk/data-centre/data-downloads-and-publications/licence-data/>

Q. 69

Do you agree that the Joint Minerals & Waste Plan should contain a policy to judge future oil and gas proposals should the situation change?

Q. 70

Do you agree that a criteria-based policy should be used to judge any future oil and gas proposals?

ISSUE: Coal

- 9.101 There is a significant coal seam in West Berkshire which runs into the western edge of the Central & Eastern Berkshire Plan area. It is deep underground and not considered to be viable for extraction. Due to the depth of the deposits, open cast mining would be impractical, and any exploitation would need to be by underground mining. It has not been considered necessary in former Berkshire minerals planning policy documents to develop a policy to address proposals for exploiting the deposits. It was considered that should an application come forward, it would be considered under the general policy for mineral extraction.
- 9.102 There is also a thin gas seam but this is classed as unprospective for coalbed methane.
- 9.103 Whilst the increasing price of energy is making more inaccessible sources viable, the Joint Minerals & Waste Plan should consider how such applications would be addressed.

ISSUE: Coal has not been addressed in minerals and waste planning policy previously.

Q. 71

Do you agree that a criteria-based policy should be used to judge any future oil and gas proposals?

Q. 72

If not, what evidence do you have to support this?

10. Waste Issues

- 10.1 The waste issues have been identified through the preparation of the *Waste: Background Study* which accompanies this Consultation Paper.
- 10.2 A key issue is the close connection between the Central & Eastern Berkshire authorities and Slough when it comes to waste management, so Slough's role is explored in further detail.
- 10.3 For consistency, waste data is categorised into three broad categories, based on the *properties*⁵⁹ of the waste: **non-hazardous**, **inert** and **hazardous**. *Non-hazardous* waste is produced mainly from both municipal solid waste (MSW) and commercial & industrial waste (C&I) sources and includes elements such as mixed general waste, recyclables, and compostable (green) waste. *Inert* wastes come mainly from construction, demolition and excavation (CD&E) activities and are less chemically reactive. Although a minor contribution to the overall arisings, *hazardous* waste is produced from all three waste sources (MSW, C&I and CD&E) and is generally harmful to humans or the environment.

ISSUE: Waste Data

- 10.4 There are different ways of estimating waste arisings (how much waste is produced in the area), but the only current comprehensive source of waste data is the Environment Agency, which collates waste transfer data in annual Waste Data Interrogator (EA WDI) and Hazardous Waste Data Interrogator (EA HWDI). This is data on waste management, rather than arisings, but due to the regulated nature of the waste sector most waste that is produced will need to be managed by licenced facilities in some way. This data has a number of caveats, but has the advantage of being mandatory data collection from the majority of waste operators. It is consistent and comparable from year to year. It is proposed to use this data as a starting point for estimating waste arisings
- 10.5 Using the EA WDI, HWDI, and data on Incinerator Inputs,
- 10.6
- 10.7
- 10.8 Table shows the waste that was managed in England that was recorded as coming from Central & Eastern Berkshire and Slough.

⁵⁹ For the purposes of data collection - the recording of waste input (*waste deposited*) at permitted waste facilities and waste output (*waste removed*) - the Environment Agency classify waste by its properties, called waste category. Please note that the term HIC (Household, industrial and Commercial) is also used for non-hazardous waste when using Environment Agency data.

Table 4- Waste arisings from the Central & Eastern Berkshire Authorities and Slough (tonnes)

Source Authority	Non-hazardous waste	Inert waste	Hazardous waste	Total
Bracknell Forest	218,294	165,071	6,774	359,341
Reading	325,423	466,756	5,945	754,497
Windsor & Maidenhead	209,830	181,903	4,102	392,457
Wokingham	73,949	137,082	7,455	216,604
Slough	320,536	382,940	23,161	657,495
Total	1,148,032	1,333,752	47,438	2,380,393

Source: WDI and HWDI, 2015 and EA Incinerator Inputs 2015

ISSUE: Waste arisings data is difficult to source, but the Environment Agency Waste Data Interrogator provides a relatively comprehensive and consistent source of data.

Q. 73

Do you agree that the Environment Agency Waste and Hazardous Waste Data Interrogators is the main, most up-to-date and most robust source of waste data available in England?

Q. 74

Do you agree that the figures in Table 4 give an approximate idea of the level of both waste arisings and waste managed in Central & Eastern Berkshire?

Q. 75

Do you agree with the use of waste data, where the source is a Central & Eastern Berkshire Authority, as a proxy for waste arisings in Central & Eastern Berkshire?

Q. 76

Do you agree with the use of waste received at facilities in Central & Eastern Berkshire as a proxy for the waste management capacity within Central & Eastern Berkshire?

Q. 77

Are there other wastes streams and waste data sources not dealt with in this report?

ISSUE: Estimating waste management capacity

- 10.9 In order to manage the waste produced in Central & Eastern Berkshire and Slough, the capacity of the available waste management facilities will need to match or exceed that of the current and predicted waste arisings in the area, thereby achieving net self-sufficiency, which is one of the plan objectives.
- 10.10 Waste capacity is the amount of waste (tonnage) that a waste facility can process based on realistic operational restrictions including any imposed by planning permissions and conditions, EA waste permits, as well as the physical realities of the site and the processing machinery. The capacity of a single site can then further be divided based on the capacities for different types of waste.
- 10.11 Waste capacity data could be sourced in different ways, but there is no comprehensive source of data and the various sources that exist have differing levels of robustness. For the JMWP we therefore intend to use the following methodology when estimating the capacity of waste sites:

Table 5 - Methodology for estimating waste site capacity

Method in priority order	Description	How will capacity be estimated
1. Waste Operator Survey	Waste Operators will be contacted directly using a survey that will ask, amongst other things, about the capacity of the site and any future plans. Efforts will be made to coordinate the survey design and methodology with other authorities in the South East.	If the number provided in the survey is the only source of information or if it is of the same scale as other source of information it will be used as the most direct data source. If it is not comparable efforts will be made to reconcile the two, but a lower number may need to be used for safety.
2. Planning Permission	Planning documents will be checked for waste capacity data.	If there is a planning condition limiting capacity to less than the maximum potential for that site, that number will be used. In the absence of such a condition estimates of capacity in the supporting documents will be used. For documents older than 5 years a comparison will be made with other sources of data and efforts may need to be made to contact the waste operator and confirm the current situation.
3. Landfill Void space	Annual EA waste data tables recording the total amount of remaining void space available.	These are considered to be robust as void data is received by the EA on a quarterly basis.
4.	Operational limits set by the EA	The top of the band will be used

Environmental Permit	waste permit.	where this is of a comparable scale to recorded throughputs. Where this is not the case, efforts may need to be made to contact the waste operator and confirm the current situation.
5. Tonnes Managed as recorded in the EA WDI	The EA WDI records data from waste transfer notes on the amount of waste managed by permitted sites on an annual basis.	A maximum value of the past 5 years will be used, adjusted by +20% for head room. The use of the 20% headroom will be monitored for accuracy and efforts may need to be made to contact the waste operator and confirm the current situation.
6. Comparison to other sites	Data on capacity from comparable sites i.e. those of a similar size, managing the same type of waste, using a similar process.	An average from the comparable sites will be used.

Source: Based on the proposed Surrey County Council methodology, 2016

ISSUE: There is no comprehensive source of data on waste capacity.

Q. 78

Do you agree with the methodology for estimating capacity proposed in Table 5?

Q. 79

Are there any other sources of capacity data that you would suggest?

Q. 80

Is there another methodology for estimating waste capacity data that could be used?

ISSUE: Non-hazardous waste data

10.12 Non-hazardous waste data is likely to be the most reliable element of the EA Waste Data Interrogator. Other sources of non-hazardous waste data arisings include data on Municipal Solid Waste (MSW) from the local authority managed Waste Data Flow system and work that has been done on estimating Commercial and Industrial (C&I) waste arisings.

10.13 While the Waste Data Flow system is considered to provide robust data due to the requirements placed on local authorities, estimates of C&I waste arisings are known to be a lot less reliable and can be considered less reliable than the EA WDI data. This is because the last comprehensive survey of C&I waste arisings was conducted in 2009 by Jacobs on behalf of the Department of Environment Farming and Rural Affairs (DEFRA), so any models using this

data are likely to be looking at a historic snapshot of waste production, as well as carry with them the caveats associated with this survey.

- 10.14 Some further estimates have been produced on C&I data for 2012 and 2014⁶⁰, but with less detail and availability of data at a regional or sub-regional level. No new survey of this scale is currently planned and a survey of even just Central & Eastern Berkshire is outside the scope and budget for the preparation of the Plan.

ISSUE: Non-hazardous waste arisings data can be sourced from different places, with different caveats and levels of reliability.

Q. 81

Do you think that non-hazardous waste arisings should be estimated using Environment Agency Waste Data Interrogator data, in combination with Waste Data Flow where required?

Q. 82

Do you think that non-hazardous waste arisings should be estimated using Waste Data Flow and Commercial & Industrial arisings models?

Q. 83

Do you think that non-hazardous waste arisings should be estimated using a combination of the above?

Q. 84

Do you think that non-hazardous waste arisings should be estimated using another method? If so, please specify what method and where the data should be sourced?

ISSUE: Non-hazardous waste management

- 10.15 **Error! Not a valid bookmark self-reference.**⁶ shows the management of waste received in Central & Eastern Berkshire and Slough in 2015, based on WDI data. This represents 102% of the waste that originated from the same area (1,148,032 tonnes). However the role of the incinerator in Slough is notable in representing more than third of this area's waste management. It is also worth noting that 35% of the waste management tonnages are recorded as having gone to waste transfer facilities, therefore they will have gone on to different facilities after that.

⁶⁰ UK statistics on waste: <https://www.gov.uk/government/statistics/uk-waste-data>

Table 6 - Non-hazardous waste management in Central & Eastern Berkshire and Slough (tonnes and percentage for each category)

Facility WPA	Landfill	MRS	On/In Land	Transfer	Treatment	Incineration	Total
Bracknell Forest				104,839	8,615		113,454
Reading				139,612	7,532		147,143
Windsor & Maidenhead				18,955	72,009		90,964
Wokingham	37,102	29,177		1,656	3,461		71,397
Slough		14,747	69,772	145,945	76,238	437,049	743,753
Total	37,102	43,925	69,772	411,006	167,855	437,049	1,166,710
Percentage	3%	4%	6%	35%	14%	37%	100%

Source: WDI, 2015 and EA Incinerator Inputs, 2015

- 10.16 Currently a significant quantity of waste goes to the Lakeside Energy from Waste (EfW) facility in Colnbrook, Slough. This is part of a contractual arrangement and is generally supported by Slough, as the facility can take much more waste than Slough Borough Council produces. This facility has a capacity of 410,000 tonnes per annum⁶¹. However, the government has indicated that it prefers the proposed additional runway at Heathrow airport as an airport expansion option⁶² and this would impact both the Colnbrook EfW and rail depot.
- 10.17 There is one operational non-hazardous landfill in the Berkshire area, which is in Wokingham (Star Works) which has around 53,000 tonnes void left for non-hazardous waste planned for 2016 and 2017, and around 105,000 tonnes void left for inert waste and restoration inputs, planned for up to 2021⁶³. Through work with the South East Waste Planning Advisory Group, it has been established that there has been a decline in operational landfill in the South East region and that landfills are becoming regional, rather than local facilities.

⁶¹ Lakeside Energy from Waste facility website - <https://www.lakesideefw.co.uk/>

⁶² Government announcement regarding Heathrow expansion - <https://www.gov.uk/government/news/government-decides-on-new-runway-at-heathrow>

⁶³ 2015 planning application at Star Works landfill - https://www2.wokingham.gov.uk/sys_upl/templates/BT_WOK_PlanningApplication/BT_WOK_PlanningApplication_details.asp?action=DocumentView&ApplicationCode=153171&pgid=1813&tid=147&noCache=740_994P_lanning%20permission

ISSUE: Non-hazardous waste is managed at a regional level and there is no self-sufficiency within Central & Eastern Berkshire, particularly in terms of Energy from Waste and non-hazardous landfill facilities.

Q. 85

Do you agree that the Colnbrook Energy from Waste facility is a vital strategic waste management facility for Central & Eastern Berkshire and Slough and so a replacement of the capacity within the area should be strongly supported?

Q. 86

Do you agree that landfill is becoming a regional level waste management facility and that it is not always appropriate to seek to allocate local sites?

Q. 87

Which of these approaches do you consider is the most reasonable in terms of waste management?

Option A - Continue to use existing waste management facilities network, even when they are in nearby counties.

Option B - Seek to make full provision within Central & Eastern Berkshire for the waste management facilities that match the estimated waste arisings.

Option C - Seek to make greater use of the existing types capacity (e.g. of inert waste facilities, see below) and provide for net self-sufficiency for waste.

Option D - Continue to use existing waste management facilities network, however seek to make greater provision for facilities higher up the waste hierarchy and provide for net self-sufficiency for waste.

ISSUE: Inert waste data

10.18 Inert waste is generated primarily from construction, demolition and excavation (CD&E) wastes. Due to the nature of the waste, much of the arisings can be re-used immediately and thus does not need to leave the site. Additionally, activities relating to inert waste may fall under exemption for waste permits and so the data would not be collected by the EA. Table 7 shows the data that the EA holds in the WDI.

Table 7 - Inert waste arisings from Central & Eastern Berkshire and Slough (tonnes and percentage for each authority)

Authority	Waste	Percentage
Bracknell Forest	165,071	12%
Reading	466,756	35%
Windsor & Maidenhead	181,903	14%
Wokingham	137,082	10%
Slough	382,940	29%
Total	1,333,752	100%

Source: WDI, 2015

- 10.19 A potential source of data on inert waste are the annual Aggregate Monitoring surveys, which include data from aggregate recycling facilities. Another option is estimating CD&E waste, which is largely inert, based on the level of construction activity in an area. A disadvantage of trying to estimate the total volume of CD&E waste, besides the poor availability of data, is that not all of it will require facilities provided through the waste planning regime so the numbers may well be an overestimate of the waste management needs for this waste stream.

ISSUE: Environment Agency Waste Data Interrogator data on inert waste is less robust than the non-hazardous data, but other sources of data may not necessarily be more comprehensive or robust.

Q. 88

Which of the following approaches do think is the most reasonable to estimate arisings of inert waste?

Option A - Use Environment Agency Waste Data Interrogator data.

Option B - Complement Environment Agency Waste Data Interrogator data with aggregate recycling monitoring data.

Option C - Complement Environment Agency Waste Data Interrogator and aggregate recycling data with estimates based on construction activity.

Option D - Other method. Please specify what method and where the data should be sourced.

ISSUE: Inert waste management

- 10.20 Central & Eastern Berkshire and Slough in 2015, based on WDI data, managed 76% of the inert waste that originated from the same area. 23% of the waste management tonnages are recorded as having gone to waste transfer facilities, while 33% went to landfill.
- 10.21 Unlike non-hazardous landfill, inert landfill has far less environmental impacts and landfilling of inert material can sometimes serve a useful purpose in that it

can be used for restoration, filling in voids, building up certain areas etc. As the guidance on what constitutes a recovery operation is reasonably specific⁶⁴, aiming to completely eliminate inert landfill may exclude some potentially beneficial uses of inert waste. Still, every effort should be made that any landfilling of inert waste is indeed beneficial.

ISSUE: Inert landfill has different characteristics than non-hazardous landfill so it may be useful to treat it differently.

Q. 89

Do you agree that inert landfill is significantly different to non-hazardous landfill?

Q. 90

Do you agree that there might be benefits to inert landfill beyond those operations that are classed as recovery?

ISSUE: Hazardous waste data and management

- 10.22 The Hazardous Waste Data Interrogator (HWDI) is considered more robust than the EA WDI, as regulations around hazardous waste are stricter and highly likely to require permits. However the HWDI does not show waste down to an individual waste facility (so individual sites cannot be identified and mapped) and excludes certain type of specialist waste, such as radioactive waste.
- 10.23 The specialist nature of hazardous waste and the facilities required to manage it, mean that these facilities are often of a regional or national nature, as the quantities of waste from each local authority are too small to justify a greater number of facilities. This waste travels further than other types of waste and each authority is not expected to provide a full range of hazardous waste management facilities.
- 10.24 Central & Eastern Berkshire and Slough produced around 47,000 tonnes of hazardous waste and managed around 11,000 tonnes of hazardous waste (23%), with 24% of the waste management tonnages recorded as having gone to waste transfer facilities.

ISSUE: Hazardous waste is a highly specialist area and it is unlikely that the Plan will be able to provide all the facilities required for all the hazardous waste streams arising in the Plan area.

⁶⁴ Waste recovery on land guidance, 2016: <https://www.gov.uk/government/collections/waste-recovery-on-land-guidance>

Q. 91

Which of the following options do you think is the most reasonable approach to managing hazardous waste?

Option A - Continue the current patterns of hazardous waste management and provide a criteria-based policy on which new proposals could be judged.

Option B - Meet net self-sufficiency through increased provision of waste management of other types of waste streams (non-hazardous and inert).

Option C - Seek to provide greater capacity in the hazardous waste management facility types that are currently present, aiming for net self-sufficiency in the hazardous waste stream.

Option D - Seek to provide greater capacity and greater diversity of hazardous waste management facilities, aiming for net self-sufficiency in the hazardous waste stream.

Q. 92

Can you suggest robust sources of data on hazardous waste facilities?

Q. 93

Can you suggest stakeholders that would have a particular interest in hazardous waste?

ISSUE: Specialist waste

10.25 Like hazardous waste, a number of other waste streams require highly specialised waste facilities. The following specialist waste streams have been identified:

- Wastewater including sewage mixture
- Oil & oil/water mixture waste
- Chemical wastes
- Waste wood
- Agricultural waste
- Food waste
- End of Life Vehicles (ELV) and metal recycling
- Waste Electrical and Electronic Equipment (WEEE)
- Clinical / healthcare waste
- Dredged material
- Mining waste
- Low Level Radioactive Waste (primarily from the non-nuclear industry)⁶⁵
- Residues from waste treatment
- Contaminated Soil

⁶⁵ The UK Radioactive Waste & Materials Inventory (<http://ukinventory.nda.gov.uk/>) does not identify any radioactive waste sites within CEB and Slough, therefore only low level radioactive waste is considered.

ISSUE: There are many types of hazardous and specialist waste and data can often be hard to obtain.

Q. 94

Do you agree that we need to consider the above specialist waste streams?

Q. 95

Are there any other types of hazardous or specialist waste that arise or that are managed in facilities in Central & Eastern Berkshire and Slough?

Q. 96

Where else could we look for data on other types of hazardous or specialist waste?

Q. 97

Are there particular types of hazardous and specialist waste that we need to plan for and why?

ISSUE: Future waste arisings

- 10.26 The waste management trends in England from 2000 to 2015 show a fluctuating situation, with downward trends between 2006 and 2009, but then a steady increase of 8 million tonnes per year on average from 2009 onwards.
- 10.27 A number of factors might influence waste arisings in the future including population and economy growth, the circular economy and leaving the European Union.
- 10.28 The planning practice guidance (PPG) for waste gives advice on how to predict waste growth in the future, based on the source and properties of the waste.⁶⁶ It states that local authorities should “set out clear assumptions on which they make their forecast, and if necessary forecast on the basis of different assumptions to provide a range of waste to be managed”. It also sets out certain assumptions and factors that it recommends considering.

ISSUE: There are a number of national and local development projects which will impact waste growth in Central & Eastern Berkshire.

ISSUE: Waste arisings growth estimates need to work with a set of reasonable assumptions.

⁶⁶ Planning practice guidance for waste, 2015- <https://www.gov.uk/guidance/waste>

Q. 98

Should we use waste management changes in the past as a basis for predicting waste arisings in the future?

Q. 99

If yes, are trends over the past 10 years a good period of time to use?

Q. 100

Should we weight waste arising predictions to take account of population and business growth predicted in the constituent authorities' emerging local plans?

Q. 101

Should we use a range of scenarios including introducing a buffer of 15% above our estimates and 15% below our estimates to demonstrate the unpredictability of future waste arisings?

Q. 102

Do you agree with the assumptions recommended for use in waste forecasting in the Planning Practice Guidance for waste?

Q. 103

What other assumptions do you think we should use?

Q. 104

Do you agree with the use of low, medium and high waste growth scenario?

Q. 105

Do you have suggestions about what range of waste growth the plan should consider, providing reasons and data sources?

ISSUE: Future waste capacity

10.29 Four main scenarios can be used to explore the potential need for waste capacity in the future:

- **Baseline scenario (business-as-usual)** - what could happen if we plan to **maintain the current capacity** of the waste infrastructure, meeting any legislative requirements, but not seeking to change how waste is currently managed.
- **Providing for our needs scenario** – what could happen if we plan to increase the full diversity of waste management facilities to better match the full range of waste types that we produce. This would include providing for more landfill.

- **Recovery improvement scenario** – what could happen if we plan to divert as much waste as possible from landfill, including through the provision of more EfW facilities.
- **Recycling improvement scenario** - what could happen if we plan to increase the recycling capacity of the waste infrastructure to encourage more diversion of waste from both landfill and EfW facilities.

ISSUE: Waste scenarios offer a way of comparing different waste management planning options, but there are many possible scenarios not all of which can be explored.

Q. 106

Do you agree that we should use waste scenarios to explore waste management planning options?

Q. 107

Do you agree with the four scenarios discussed above and that they cover the majority of options?

Q. 108

If not, what scenarios would you suggest?

ISSUE: Locational requirements for waste facilities

10.30 National guidance suggests plans should not generally prescribe the waste management techniques or technologies that will be used to deal with specific waste streams in the area. Rather, the type or types of waste management facility that would be appropriately located on the allocated site or in the allocated area should be identified.

10.31 We have identified seven broad types of waste management development:

1. *Category one:* Activities requiring open sites or ancillary open areas (involving biological treatment)
2. *Category two:* Activities requiring open sites or ancillary open areas (not involving biological treatment)
3. *Category three:* Activities requiring enclosed industrial premises (small scale)
4. *Category four:* Activities requiring enclosed industrial premises (large scale)
5. *Category five:* Activities requiring enclosed building with stack (small scale)
6. *Category six:* Activities requiring enclosed building with stack (large scale)
7. *Category seven:* Landfilling

ISSUE: There are many types of waste management facilities, with differing locational requirements.

Q. 109

Do you agree with the seven broad categories of waste management facilities listed above as a useful way of grouping them by locational requirements?

Q. 110

If not, what are your suggestions and why?

Q. 111

Do you have any comments on the particular planning considerations they may have?

ISSUE: Transportation of waste

10.32 Central & Eastern Berkshire has many close functional interrelationships with its neighbouring authorities. Waste produced in Central & Eastern Berkshire is not necessarily processed within the Plan area. Some is likely to be transported elsewhere and at the same time waste may be brought into the area.

10.33 As there are currently no operational rail depots or wharves within Central & Eastern Berkshire, all of the waste within the Plan is transported by road. The possibility of using the Colnbrook rail depot in Slough for the transport of waste could be explored, however its future operation is threatened by the Heathrow Expansion plans, as discussed in the minerals section.

ISSUE: Central & Eastern Berkshire is well connected by road and rail. It is assumed that all waste movements are undertaken by road due to the lack of any rail depot or wharf within the Plan area.

Q. 112

Do you agree with the assumption that all waste is currently transported by road in Central & Eastern Berkshire?

Q. 113

Do you agree that it is unlikely that waste will be transported by water during the Plan period and if not where should transfer docks be located?

Q. 114

Do you agree that transportation of waste by rail should be encouraged, where possible and if so where should rail depot facilities be located?

11. Supporting documents

11.1 This Consultation Paper is supported by a number of documents including:

- Minerals: Background Document;
- Waste: Background Document;
- Sites Assessment Methodology Report; and
- Other Methodologies Report.

11.2 We would welcome your comments on these documents as they will help to inform how the plan-making process continues, particularly in relation to identifying sites for allocation within the Minerals & Waste Plan but also in relation to the data that is used to identify what our future minerals and waste needs will be during the Plan period.

11.3 There are also a number of factual documents which also support the Plan-making process including:

- Consultation Strategy
- Duty to Cooperate Statement
- Equalities Impact Assessment
- Sustainability Appraisal (incorporating Strategic Environmental Assessment) – Scoping Report
- Habitats Regulation Assessment – Methodology and Baseline

11.4 We do not require your comments on these documents but they are available for reference.

12. How to Respond

[add detail on website /response form]

Glossary

Aggregate Monitoring (AM) Survey: The aggregate minerals survey provides information on the national and regional sales, inter-regional flows, transportation, consumption and permitted reserves of primary aggregates in England. The surveys cover both land won and marine dredged aggregates.

Amenity: Something considered necessary in order to be able to live comfortably

Apportionment: National government set a figure for the production of aggregates, usually expressed as an annual figure, which a mineral planning authority has to take account of and provide for in their minerals planning documents.

Biological Treatment: Technologies that use bacteria under controlled conditions to break down organic materials and wastes.

Brickworks: A factory or plant where bricks are made.

British Geological Survey (BGS): The British Geological Survey focuses on public-good science for government, and research to understand earth and environmental processes. It provides objective and authoritative geoscientific data, information and knowledge.

Central and Eastern Berkshire: The administrative areas of Bracknell Forest Council, Reading Borough Council, the Royal Borough of Windsor & Maidenhead and Wokingham Borough Council.

Claypits: A pit or mine from which clay is extracted

Commercial Waste: A legal definition relating to waste from premises used for trade, business, sport, recreation or entertainment, etc.

Construction, Demolition and Excavation (CD&E) wastes: Wastes from building and civil engineering activities. Legally classified as industrial waste.

Department for Food and Rural Affairs (DEFRA): The UK Government department responsible for environmental protection, food production and standards, agriculture, fisheries and rural communities.

Department of Communities and Local Government (DCLG): The UK Government department for communities and local government in England.

End of Life Vehicle (ELV): End of Life Vehicle such as an old car disposed of as scrap.

Energy Recovery Facility (ERF): A facility at which waste material is burned to generate heat and / or electricity.

Energy Recovery Incineration (Energy from Waste (EfW)): Burning of waste materials at high temperatures under controlled conditions with the utilisation of the heat produced to supply industrial or domestic users, and/or generate electricity.

Environment Agency (EA): A public organisation with the responsibility for protecting and improving the environment in England and Wales. Its functions include the regulation of industrial processes, the maintenance of flood defences and water resources, water quality and the improvement of wildlife habitats.

Environmental Permit: Permits are required by anyone who proposes to deposit, recover or dispose of waste. The permitting system is separate from, but complementary to, the land use planning system. The purpose of an Environmental Permit and the conditions attached to it is to ensure that the waste operation which it authorises is carried out in a way which protects the environment and human health.

Green Belt: An area designated in planning documents, providing an area of permanent separation between urban areas. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the most important attribute of Green Belts is their openness.

Habitats Regulation Assessment (HRA): Statutory requirement for Planning Authorities to assess the potential effects of land-use plans on designated European Sites in Great Britain. The HRA is intended to assess the potential effects of a development plan on one or more European Sites (collectively termed 'Natura 2000' sites). The Natura 2000 sites comprise Special Protection Areas (SPAs) and Special Areas of Conservation (SACs).

Hazardous Waste: Hazardous waste is waste that contains hazardous properties that may render it harmful to human health or the environment. Hazardous wastes are listed in the European Waste Catalogue.

Hazardous Waste Data Interrogator (HWDI): The Environment Agency's CDR that is released annually and contains information on hazardous waste received, hazardous waste removed and hazardous waste moved between permitted waste operators by local authorities and regional areas.

Household Waste: A legal definition relating to waste from domestic sources such as households, caravans and residential homes.

Incinerator Bottom Ash (IBA): The coarse residue left on the grate of waste incinerators.

Industrial Waste: A legal definition relating to waste from any factory, industrial process (excluding mines and quarries) or premises used for services such as public transport or utilities, etc. Construction and demolition waste is classified as industrial waste.

Inert Waste: Waste that does not normally undergo any significant physical, chemical or biological changes when deposited at a landfill site. In the context of inert waste, it is materials such as soil, clay, chalk and spoil.

Landbank: A measure of the stock of planning permissions in an area showing the amount of un-exploited mineral, with planning permissions, and how long those supplies will last at the locally apportioned rate of supply.

Landfill: An engineered and controlled waste disposal facility at which waste is placed on or in the land.

Land-won: Aggregate won from the land.

Local Aggregate Assessment (LAA): The National Planning Policy Framework identifies that mineral planning authorities should produce Local Aggregate Assessments (LAAs) to support the preparation of Mineral Local Plans and act as a Monitoring Report. The LAA should include an estimate of what will constitute a steady and adequate supply of aggregates and should be used as a basis for the provision for aggregate supply made in a Local Plan. The LAA also provides a basis for assessing the need for minerals supply infrastructure such as marine aggregate wharves, recycling facilities and rail depots.

Low Level Radioactive Waste (LLW): This is generally protective clothing, tools, equipment rags, filters, etc., that mostly contain short-lived radioactivity. Although it does not need to be shielded, it needs to be disposed of in a different manner than when disposing of every-day rubbish.

Managed Aggregate Supply System (MASS): A system of addressing the spatial imbalances in aggregate supply and demand. MASS is used by government to secure adequate and steady supplies of minerals needed by society and the economy without irreversible damage, within the limits set by the environment and assessed through sustainability appraisals.

Marine-won: Aggregate dredged from the sea, almost exclusively sand and gravel.

Mineral Products Association (MPA): The Mineral Products Association is the trade body for the UK's aggregates, cement and concrete industries.

Materials Recovery Facility (MRF): A plant for separating out recyclable waste streams, either mechanically or manually, prior to reprocessing.

Mineral Planning Authority (mpa): The local planning authority responsible for planning control over mineral extraction and other management related development.

Municipal Solid Waste (MSW): Household waste and any other wastes collected by a Waste Collection Authority, or its agents, such as municipal parks and gardens'

waste, street litter, waste from fly-tipping, waste delivered to council recycling points and Civic Amenity site waste.

National Planning Policy Framework (NPPF): In 2012, the Government streamlined a number of planning policies into one main document – the National Planning Policy Framework (NPPF). This contains the policy framework that Local Plans need to follow and planning decision-making. Local Plans will need to be compliant with the NPPF.

Net Self Sufficiency: Providing enough waste management capacity to manage the equivalent of the waste generated in a given area, while recognising that some imports and exports will continue.

Non Hazardous Landfill: One of the three classifications of landfills made by the Landfill Directive, taking non-hazardous waste.

Non Hazardous Waste: Waste permitted for disposal at a non-hazardous landfill, such waste is neither inert or hazardous and includes the majority of household and commercial wastes.

On / In Land: A waste management category used by the Environment Agency for waste that has been disposed of on or in land, but that classifies as a recovery operation and not as landfill.

Primary Aggregate: These are aggregates produced from naturally occurring mineral deposits, extracted specifically for use as aggregate and used for the first time. They are produced either from rock, formations that are crushed to produce 'crushed rock' aggregates, or from naturally occurring sand and gravel deposits.

Rail Depot: A railway facility where trains regularly stop to load or unload freight (goods). It generally consists of a platform and building next to the tracks providing related services.

Recycled Aggregate: Aggregate materials recovered from construction and demolition processes and from excavation waste on construction sites.

Recycled / Recovered Products: Products manufactured from recyclables or the by-products of recovery and treatment processes e.g. secondary aggregates manufactured from incinerator ash.

Recycling: The series of activities by which discarded materials are collected, sorted, processed and converted into raw materials and used in the production of new products.

Residual Waste: Waste which cannot be recycled, has not be captured in a recycling scheme or rejected after sorting/recycling has taken place.

Restoration: Process of returning a site to its former use, or restoring it to a condition that will support an agreed after-use such as agriculture or forestry.

Safeguarding: The method of protecting needed facilities or mineral resources by preventing inappropriate development from affecting it. Usually, where sites are threatened, the course of action would be to object to the proposal or negotiate an acceptable resolution.

Secondary Aggregate: Aggregates derived as a by-product of other quarrying and mining operations or industrial processes, including colliery spoil, china clay waste, slate waste, power station ashes, incinerator bottom ashes and similar products.

Sharp Sand and Gravel: Coarse sand and gravel suitable for use in making concrete.

Soft Sand: Fine sand suitable for use in such products as mortar, asphalt and plaster.

Special Waste: Waste as defined in the Control of Pollution (Special Waste) Regulations 1980, which may be dangerous to life or has a flashpoint of 21 degrees C or less, or is a medicinal product available only on prescription, requiring special care in its transport and disposal. Now superseded by Hazardous Waste.

Sterilisation: When a change of use, or the development, of land prevents possible mineral exploitation in the foreseeable future.

Strategic Environmental Assessment (SEA): A system of incorporating environmental considerations into policies, plans, programmes and part of European Union Policy. It is sometimes referred to as strategic environmental impact assessment and is intended to highlight environmental issues during decision making about strategic documents such as plans, programmes and strategies. The SEA identifies the significant environmental effects that are likely to result from implementing the plan or alternative approaches to the plan.

Sustainability Appraisal (SA): In UK planning law, an appraisal of the economic, environmental and social effects of a plan from the outset of the preparation process, to allow decisions that are compatible with sustainable development. Since 2001, sustainability appraisals have had to conform to the EU directive on Strategic Environmental Assessment (SEA).

Tileworks: A place where tiles are made.

Transfer Station: A site to which collected waste is delivered and transferred to bulk transport for onward delivery by road, rail or water to a waste processing, reprocessing, recycling, recovery or disposal site.

Void Space: Unused licensed capacity at a landfill site.

Waste: Any substance or object which the producer or the person in possession of it intends to, is required to, or does discard. Defined by the Environmental Protection Act 1990. Waste includes any scrap material, effluent or unwanted surplus substance or article which requires to be disposed of because it is broken, worn out, contaminated or otherwise spoiled. Explosives and radioactive wastes are excluded

Waste arisings: The amount of waste generated in a given locality over a given period of time.

Wastewater: Wastewater is a broad term describing a mixed liquid waste which can contain a wide range of contaminants in varying concentrations. It is produced by domestic residences, commerce and industry, and/or agriculture and is often disposed of via a pipe, sewer or similar structure.

Waste Data Interrogator (WDI): Released by the Environment Agency annually and contains information on waste received, waste removed and waste moved between permitted waste operators by local authorities and regional areas.

Waste Electrical and Electronic Equipment (WEEE): End of life electrical and electronic equipment. Either classed as household or non household WEEE.

Waste Hierarchy: Preferred waste management options in the following order (most preferable first): reducing waste; reusing waste; recovery (recycling, composting, energy recovery) and only then disposal as a last option.

Waste Planning Authorities (WPA): The local planning authority responsible for planning control over waste disposal and other management related development.

Waste Transfer Station (WTS): A location where waste can be temporarily stored, separated and bulked after being dropped off by domestic.