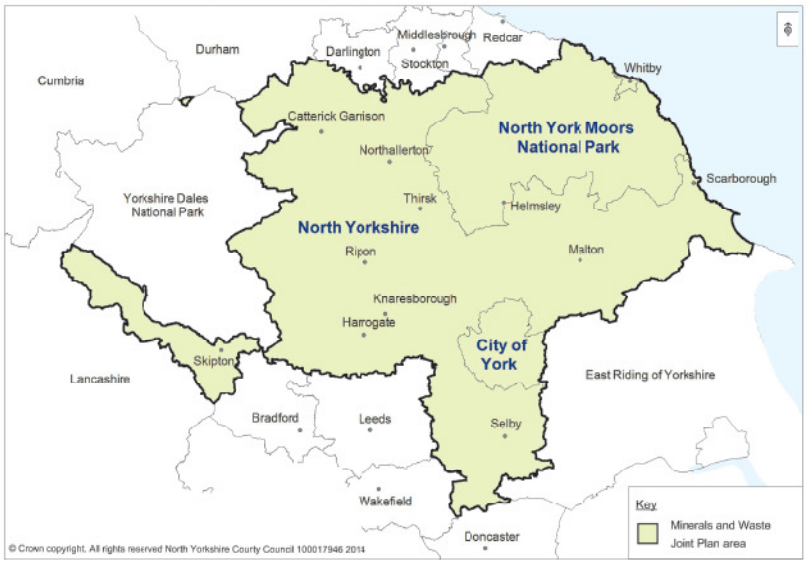
Minerals and Waste Joint Plan



Draft Preferred Options Consultation

August 2015

City of York Council | North York Moors National Park Authority | North Yorkshire County Council

Contact us

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Tel: **01609 780780** Email: **mwjointplan@northyorks.gov.uk**

If you would like this information in another language or format such as Braille, large print or audio, please ask us.

Foreword

As planning authorities for minerals and waste in each of their areas, North Yorkshire County Council, City of York Council and the North York Moors National Park Authority have a responsibility to take decisions on planning applications for related development. The three Authorities also have a duty to produce planning policies to help take those decisions, which can often be controversial because of the scale and nature of development involved.

Minerals such as sand and gravel, limestone and clay are essential to meeting society's needs for economic growth and development. Other minerals, such as onshore gas, are important in helping meet our needs for energy. The North Yorkshire area is rich in minerals resources and there is a long history of mining and quarrying. In some areas the jobs and economic benefits of mineral extraction are an important part of local community life.

North Yorkshire is also rich in high quality landscapes and the historic built environment and includes 2 National Parks, 4 AONBs and a Heritage Coast, therefore it is especially important to ensure that the working of essential minerals takes place without causing harm to these special landscapes.

It is now well known that Government, commerce and industry and individuals all need to do more to ensure that the waste we produce can be dealt with in less harmful and more efficient ways. In particular, waste needs to be viewed less as a problem and more as a resource, which can be reused, recycled, or from which other value can be recovered.

Ensuring the continued supply of the minerals which may be required, as well as ensuring the availability of the facilities we need to manage waste effectively, can lead to pressure for new development, such as new or extended quarries and waste management sites. As well as bringing benefits, these forms of development can of course affect our environment, communities, quality of life and climate change, for example through lorry movements and impacts on the landscape and from noise and dust.

The three Authorities are therefore working jointly to prepare a Minerals and Waste Plan which, once finalised, will be a long term plan containing planning policies to help us take decisions about matters such as where, when and how minerals and waste developments should be planned and controlled up to 2030.

Work on the Minerals and Waste Joint Plan started in May 2013, when we sought views on what a minerals and waste plan for the area should contain. A further detailed consultation took place in early 2014. The feedback we received from these consultations has helped us identify the issues on which the Plan should focus and the new policies we think we should adopt.

About this Consultation

This **Preferred Options** consultation is the third main step on the way to preparing the Minerals and Waste Joint Plan. It presents new draft planning policies for minerals and waste, and identifies possible new sites for minerals and waste development which we consider may be suitable. Importantly, it provides an opportunity for you to let us know your views on these matters before the Plan is finalised.

How to get involved

It is really important that as many people as possible get involved and tell us what they think. By getting involved now you can help shape policy for making decisions on minerals and

waste planning applications within the Joint Plan area. You can help us by telling us whether we have identified:

- an appropriate vision and objectives for the Plan
- the right policies for minerals and waste
- suitable locations for new minerals and waste development

We have included a number of specific questions which you may wish to consider, but please let us have you views on any aspect of the draft Plan.

Full details of the consultation, including a range of supporting documents and a response form to help you give your views, are available on our website: www.northyorks.gov.uk/mwconsult.

We recommend that you use the response form as this will enable us to record your comments correctly. All comments should include a paragraph or question number and/or a policy reference number. The reference number can be found in the top left hand corner of each policy box presented. If it is not clear which section or set of options your comments relate to we may need to contact you for clarification.

You can send us your completed response form either by post to:

Freepost RTKH-ZLEU-GAUT
Minerals and Waste Joint Plan Team
Planning Services
Business and Environmental Services
North Yorkshire County Council
County Hall, Northallerton
DL7 8AH

Or by email to: mwjointplan@northyorks.gov.uk

The closing date for consultation responses is **XXXX**

Please note for postal responses there is no need to use a stamp.

Alternatively, if you would like to speak to someone about this consultation please contact us using the contact details below:

North Yorkshire County Council: Tel: 01609 780780

City of York Council: Tel: 01904 551356

North York Moors National Park Authority: Tel: 01439 772700

Next steps

Following this consultation we will produce a revised Draft Plan and make this available for further comment before it is submitted for an independent public examination.

We currently expect the Minerals and Waste Joint Plan to be formally adopted by early 2017.

Index of Policies

W09	Managing power station ash
W10	Overall locational principles for provision of new waste capacity
W11	Waste site identification principles

Minerals and waste supporting infrastructure policies

I01	Minerals and waste transport infrastructure
I02	Locations for ancillary minerals infrastructure

Minerals and waste safeguarding policies

S01	Safeguarding mineral resources
S02	Developments proposed within Minerals Safeguarding Areas
S03	Waste management facility safeguarding
S04	Transport infrastructure safeguarding
S05	Minerals ancillary infrastructure safeguarding
S06	Consideration of applications in Consultation Areas

Development management policies

D01	Presumption in favour of sustainable minerals and waste development
D02	Local amenity and cumulative impacts
D03	Transport of minerals and waste and associated traffic impacts
D04	North York Moors National Park and the AONBs
D05	Minerals and waste development in the Green Belt
D06	Landscape
D07	Biodiversity and geodiversity
D08	Historic environment
D09	Water environment
D10	Reclamation and afteruse
D11	Sustainable design, construction and operation of development
D12	Protection of agricultural land and soils
D13	Consideration of applications in Development High Risk Areas

List of Abbreviations

ALC	Agricultural Land Classification
AWRP	Allerton Waste Recovery Park
AD	Anaerobic Digestion
AONB	Area of Outstanding Natural Beauty
BGS	British Geological Survey
BREEAM	Building Research Establishment Environmental Assessment Methodology
CPRE	Campaign to Protect Rural England
CCS	Carbon Capture and Storage
CYC	City of York Council
CMM	Coal Mine Methane
C&I	Commercial and Industrial Waste
CIL	Community Infrastructure Levy
CDEW	Construction, Demolition and Excavation Waste
DCLG	Department for Communities and Local Government
DECC	Department of Energy and Climate Change
DEFRA	Department of Environment, Food and Rural Affairs
EA	Environment Agency
EIA	Environmental Impact Assessment
FBA	Furnace Bottom Ash
GVA	Gross Value Added
HSE	Health and Safety Executive
LVIA	Landscape and Visual Impact Assessment
LCA	Landscape Character Assessment
LAA	Local Aggregate Assessment
LACW	Local Authority Collected Waste
LEP	Local Economic Partnership
LLRW	Low level (non-nuclear) Radioactive Waste
MCAs	Mineral Consultation Areas
MPA	Mineral Planning Authority
MSA	Mineral Safeguarding Area
MWJP	Minerals and Waste Joint Plan
NORM	Naturally Occurring Radioactive Materials
NPPF	National Planning Policy Framework
NPPG	National Planning Policy Guidance
NTS	National Transition System
NYMNPA	North York Moors National Park Authority
NY	North Yorkshire
NYCC	North Yorkshire County Council
OGA	Oil and gas authority
PEDL	Petroleum Exploration and Development Licence
PFA	Pulverised Fuel Ash
RSS	Regional Spatial Strategy
SSSI	Sites of Special Scientific Interest

SAC	Special Area of Conservation
SPA	Special Protection Area
SiDCaMP	Sustainability in Design, Construction and Management of Properties
SUDS	Sustainable Drainage Systems
UCG	Underground Coal Gasification
UKOOG	United Kingdom Onshore Operations Group
WMA	Waste Management Authority
WPA	Waste Planning Authority
WHS	World Heritage Site
YDNP	Yorkshire Dales National Park

A glossary of terms used in the Preferred Options consultation is provided at the end of this document.

Chapter 1: Background

1.1 The Minerals and Waste Joint Plan is being produced for the three planning authority areas of North Yorkshire, the City of York and the North York Moors National Park. Figure 1 below shows the area covered by the Joint Plan.

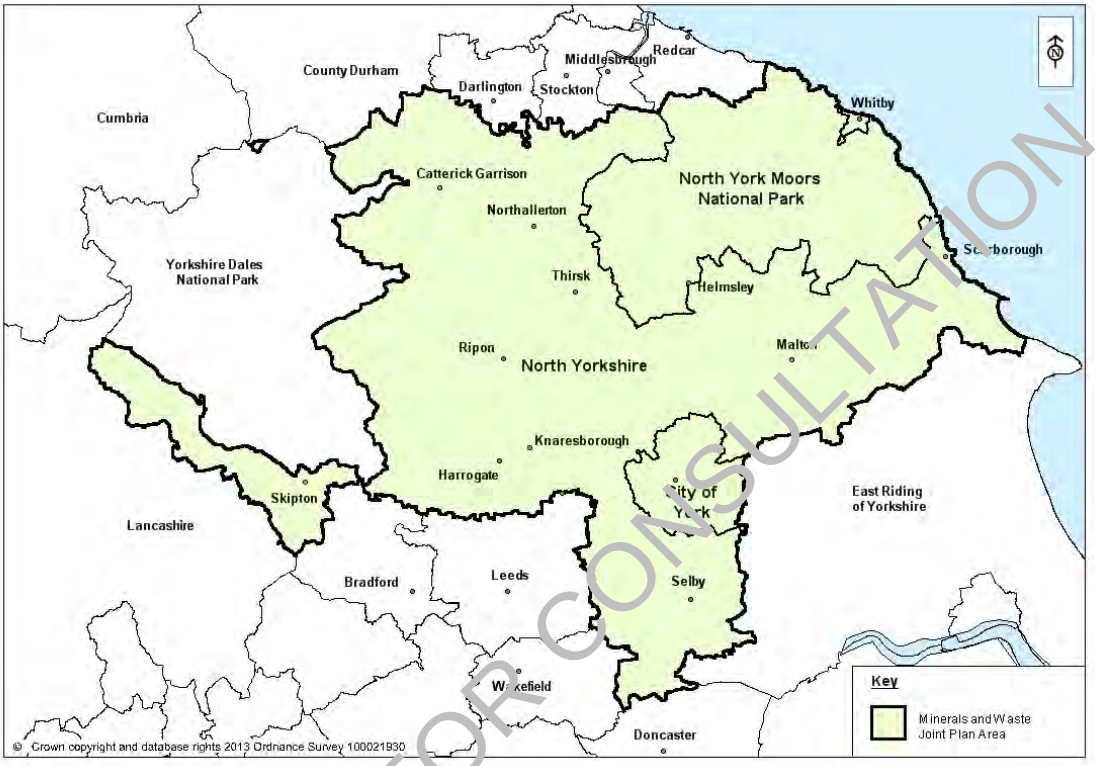


Figure 1: The Joint Plan area

Statutory Requirement

1.2 Planning Authorities are required to prepare Development Plans setting out policies for the development and use of land in their area. Unitary authorities, National Park Authorities and County Councils are minerals and waste planning authorities, with the former two, along with District and Borough councils, also being local planning authorities having responsibility for all other types of development. Thus, in the Joint Plan area, the County Council is the minerals and waste planning authority for the parts of the county located outside of the two National Parks, with the City of York Council and the North York Moors National Park Authority being responsible for minerals and waste planning within their areas. The Development Plans of minerals and waste planning authorities must deal with minerals and waste matters, either as part of wider planning documents or as separate plans. Planning authorities can prepare plans for their own area or they can work jointly with other planning authorities to prepare plans. A map showing the boundaries of all the planning authorities in the Joint Plan area is provided after paragraph 1.3 below.

1.3 The role of the Development Plan is to guide future development of the area. It forms the starting point for decision making on planning applications. Proposed development that accords with an up-to-date plan should be approved and proposed development that conflicts should be refused unless other material considerations indicate otherwise.

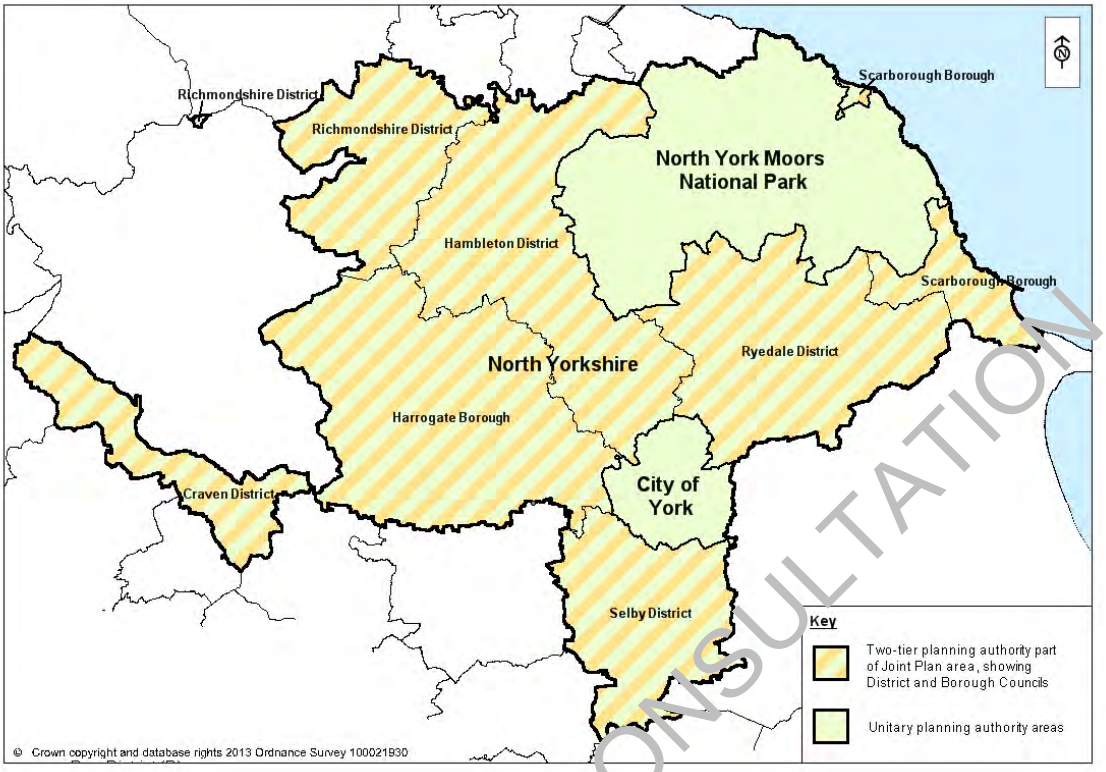


Figure 2: Planning Authority boundaries in the Joint Plan area

Why produce a Joint Plan?

1.4 There is a recognition that minerals and waste planning issues often affect larger than local areas and can best be planned for at a wider than local level. In addition one of the key changes to the planning system under the 2011 Localism Act has been the introduction of the 'duty to co-operate', which seeks to enhance the way planning authorities work together in preparing their plans and the NPPF encourages planning authorities to consider preparing joint plans. As a result, the three authorities have decided to prepare a Joint Plan. The Yorkshire Dales National Park Authority is including minerals and waste policies in their Local Plan that they are currently producing.

1.5 As the sole planning authorities for their areas, the City of York Council and the North York Moors National Park Authority also have responsibility to plan for other matters such as housing and commercial development land. City of York Council is currently producing a Local Plan. The Plan contains high-level policies on minerals and waste and will provide part of the strategic context for the detailed policies and proposals in the Joint Plan. The North York Moors National Park Authority adopted its Core Strategy and Development Policies in 2008. The North York Moors Core Strategy and Development Policies Document contains policies on minerals and waste, which will be replaced by the Joint Plan. The National Park will soon commence work on a new Local Plan which will replace the Core Strategy and Development Policies. A schedule of existing policies adopted by the three authorities, which it is proposed will be replaced by new policies in the Minerals and Waste Joint Plan, is provided in Appendix 4 for information.

What's been done so far both individually and jointly?

1.6 The First Consultation on the Joint Plan was carried out in May/June 2013 in accordance with Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012. This provided an introduction to some of the key information relating to minerals and waste in the area and marked the launch of the preparation of the Joint Plan. Views were invited on what the Joint Plan should contain. The issues raised in the consultation responses, together with issues raised in previous consultations helped us prepare an Issues and Options consultation for the Joint Plan, which was launched for consultation in February 2014. This set out a range of policy options which could be followed to help deal with the issues identified, and invited views on these and any other options which should be considered.

1.7 Alongside the First Consultation and Issues and Options consultation, a 'call for sites' was also issued. This provided an opportunity for relevant parties to provide details of sites that they would wish to see identified as being suitable in principle for future minerals or waste related development. Two previous 'call for sites' had also been issued by City of York Council in August 2012 and North Yorkshire County Council in January 2011. The various sites submitted have been considered in preparing this Preferred Options draft Plan and initial views on which sites are suitable for inclusion in the Plan are set out in Appendix 1.

1.8 Prior to commencement of work on the Joint Plan, North Yorkshire County Council was in the early stages of preparing separate minerals and waste plans. Relevant information gathered from work on those plans is being carried forward into the development of the Joint Plan.

Consultation Responses

1.9 Consultation activities have been carried out to help ensure the views of individuals, minerals and waste industry, statutory bodies and other interested parties are taken into account during the early stages of Plan preparation. The First Consultation on the Minerals and Waste Joint Plan took place in May and June 2013. This sought to obtain views on what the Plan should contain and what issues it should address and the responses have been considered alongside responses received to previous consultations carried out by NYCC. A further main stage of consultation took place between February and April 2014. This Issues and Options consultation sought views on a range of potential policy approaches which would respond to the issues and challenges facing the Plan area. Details of the responses received to both main stages of consultation can be found on the Joint Plan website at www.northyorks.gov.uk/mwjointplan.

1.10 The Issues and Options consultation considered a wide range of issues. Summary information about responses received to the consultation and how they have helped us prepare this Preferred Options consultation are contained in a series of background documents, available via the Joint Plan website.

What is the Preferred Options stage?

1.11 Although not a formal statutory stage in preparing a new Plan, the purpose of the Preferred Options stage is to provide an indication, pending further consultation, of the proposed new policies which the Authorities wish to adopt.

1.12 The consultation provides an important opportunity for interested parties, including Town and Parish Councils, operators, developers, landowners, community groups and members of the public, to influence the content of the Plan before a final Draft 'Publication' Plan is prepared for examination in public. The consultation responses received at Preferred Options stage, along with the Sustainability Appraisal and consideration of the evidence base and other relevant policy, will help us prepare the publication Draft Plan, which will itself be subject to further consultation before an independent examination takes place. The current timetable for producing the Minerals and Waste Joint Plan is as follows.

Joint minerals and waste plan	Date
Preparation of a local plan including: Regulation 18 Consultation - (setting the scene and identifying issues) Issues and Options Consultation (identifying issues and potential options for dealing with issues Preferred Options Consultation (detailing of options selected from issues and options consultation)	May 2013 - December 2015
Publication (opportunity to comment before consideration by the Planning Inspector regarding the Plan's soundness)	June 2016
Submission	September 2016
Examination	October 2016-February 2017
Adoption	March 2017

Sustainability Appraisal and Habitats Regulations Assessment

1.13 Sustainability Appraisal is a statutory requirement under the Planning and Compulsory Purchase Act 2004 and Strategic Environmental Assessment is required by European law. The two assessments are being undertaken simultaneously in relation to the Joint Plan under the term Sustainability Appraisal. The Sustainability Appraisal will assess the potential effects of the Plan at each stage in relation to sustainability objectives and inform further development of the Plan. A Sustainability Appraisal scoping report, which sets out the methodology for the Sustainability Appraisal, has been prepared and consulted upon and is available in the Sustainability webpage: www.northyorks.gov.uk/mwsustainability.

1.14 At Issues and Options stage each option was assessed against each of the sustainability objectives and the results were presented in a sustainability report. Similarly, a sustainability report has been prepared to accompany the Preferred Options Draft Plan, which can be viewed on the sustainability webpage. A summary of the findings of the appraisal is presented alongside each preferred option in this consultation document. Where appropriate, recommendations arising from the appraisal process have been incorporated into the preferred policy text and supporting justification as presented in this consultation document.

1.15 Habitats Regulations Assessment, required by European law, is concerned with ensuring that the Plan will not cause harm to the integrity of Special Areas of Conservation, Special Protection Areas and Ramsar sites. An initial test of each draft policy and site in terms of its likely significant effects has been carried out and can be viewed in the Habitats Regulations Assessment report on the sustainability webpage. Findings from the Assessment have been incorporated into the text of the draft Plan where relevant.

Chapter 2: Context

2.1 This Chapter provides information relating to current planning policy, both national and local, supporting evidence for the Plan and a description ('spatial portrait') of the Joint Plan area, setting out information about what the area is like now, as well as an introduction to minerals and waste development. It provides the background information for identifying the issues and challenges that the Plan needs to address.

Spatial Portrait of the Joint Plan area

2.2 A detailed description of the Joint Plan area can be found within the evidence supporting the Plan, all of which can be found on the Joint Plan website at www.northyorks.gov.uk/mwevidence.

2.3 The Joint Plan area covers the combined area of the three minerals and waste planning authorities of North Yorkshire County Council, (NYCC), the City of York Council, (CYC), and the North York Moors National Park Authority[1] (NYMNPA). The three authority areas form the major part of the North Yorkshire sub-region, along with the adjacent Yorkshire Dales National Park Authority area, which is preparing a separate local plan including minerals and waste issues.

2.4 The total extent of land covered by the Joint Plan area is 6,718 square kilometres – this is a particularly large and diverse planning area, covering most of the county of North Yorkshire which is the largest in England, plus the City of York Council area[2]. The NYCC area is largely rural containing a number of small market towns and numerous villages, along with the urban areas of Scarborough and Harrogate. The CYC area is focussed upon the historic city and is mostly urban, though with a rural hinterland. The NYMNPA is very rural and sparsely populated. It was designated as a National Park due to its 'intrinsic merits as an area of beautiful and unspoilt country and magnificent coast with a wealth of architectural interest.'

2.5 A total of about 789,000 people live within the Joint Plan area. At an average of 117 people per km^2 the area is more sparsely populated than many English counties, even taking account of relatively high population density in York. Most of these live within the North Yorkshire area whilst 202,400 live in York and 23,146 live in the North York Moors National Park. It is forecast that the population of the Joint Plan area will grow to around 815,200 by 2022 and 838,500 by 2030. York is a fast growing city with a population increase of 9.2% between 2001 and 2011. It is forecast that this relatively high growth will continue with the population of York reaching around 222,400 by 2030.[3] Relatively high growth is also projected for Selby District, whereas growth in other parts of the Plan area is expected to be more modest. Increase in population is expected to be accompanied by a proportionately higher increase in the number of households, as a result of an expected decline in

[1] Although the majority of the North York Moors National Park Authority area lies within North Yorkshire, a small area in the northern part of the National Park falls within the Redcar and Cleveland Borough Council area (see fig. 8). The National Park Authority is the planning authority for the whole of the area of the National Park. As Waste Management Authority, North Yorkshire County Council only has responsibility for that part of the National Park area which lies within North Yorkshire, with Redcar and Cleveland Borough Council being the Waste Management Authority for the remainder of the National Park area.
[2] The actual area covered also covers the small part of Redcar and Cleveland Borough which is within the North York Moors National Park, but does not include the Yorkshire Dales National Park
[3] ONS, 2013 Mid-Year Population Estimates and Population Projections based on 2011 Census (2015)

average household size. Correspondingly high rates of housing growth are proposed in some parts of the Plan area in response to these expected changes.

2.6 The largest commercial and industrial sectors in the Joint Plan area are retail, accommodation and food services and manufacturing, although in York transport and storage is also a prominent sector and in the North York Moors National Park agriculture, mining, forestry and fishing are important. Selby District contains a significant proportion of the area's industry, including power generation and coal mining, although the latter activity is due to cease at the end of 2015. Within NYCC a very high proportion of the area is occupied by agricultural land, much of which is graded as being of 'best and most versatile' quality. The high quality of the Joint Plan area's natural and historic environment and the presence of a substantial length of attractive coastline mean that tourism and recreation is also of importance to the local economy.

2.7 Unemployment in the Joint Plan area is generally lower than the regional and national average, although in line with national trends has been rising over recent years. Employment in mining and quarrying represents around 1% of employment in the Joint Plan area, although Boulby Potash Mine is the largest employer in the North York Moors National Park. Around 1,800 people work in industries related to waste in North Yorkshire. Approval has recently been granted for a second potash mine in the Park and this is planned to be developed within the course of the plan period.

2.8 The main transport links in the area run on a north-south axis, via the A1M and A1 and the East Coast Main Line. East-west routes are generally poorer except from York and the East Coast Mainline and many of the more rural parts of the area are particularly remote from major transport networks.

2.9 The emerging Spatial Plan for York, North Yorkshire and East Riding indicates that the overall focus for growth is to realise the benefits of significant development and investment opportunities in the North-South Corridor focussed on the A1/A19 and East Coast Mainline. Although the Spatial Plan is not a Statutory Plan it is a material consideration in decision taking. The Joint Plan area is also closely related to its more urban neighbours - the Tees Valley to the north and the Leeds City Region to the south. The Districts of Craven, Harrogate and Selby, along with York, are all part of the Leeds City Region. The economies of the Tees Valley and Leeds City Region are particularly relevant to North Yorkshire as commuter patterns cross into these areas. Population and household growth in adjacent urban areas is also expected to be relatively high, particularly in West Yorkshire, and population and economic growth in these areas may have implications for minerals demand in North Yorkshire.

2.10 The North York Moors National Park was designated in 1952 due to its 'intrinsic merit as an area of beautiful and unspoilt country and magnificent coast with a wealth of architectural interest'. The diverse landscape of the National Park includes open heather moorland, interspersed by narrow dales, extensive woodland areas, high coastal cliffs and dramatic geological features such as Sutton Bank and Roseberry Topping. The statutory purposes for National Parks, as set out in the 1995 Environment Act, are to 'conserve and enhance the natural beauty, wildlife and cultural heritage of the Park and promote opportunities for the understanding and enjoyment of the special qualities of the Park by the public'. In pursuing these two purposes the 1995 Act also places a duty on National Park Authorities 'to seek to foster the economic and social well-being of local communities'.

2.11 There are two AONBs in the Joint Plan area - Howardian Hills and Nidderdale - as well as small parts of two others, Forest of Bowland and North Pennines. In terms of

planning policy the AONBs enjoy the same level of landscape protection as National Parks. The primary aim of the designation is to conserve and enhance the natural beauty of the landscape. Much of the coastline of the Joint Plan area is defined as Heritage Coast for its natural beauty. A number of local landscape designations have been identified by the District and Borough councils. The implications of a large part of the Joint Plan area being either National Park or AONB are significant in terms of planning for minerals and waste, which are typically large-scale industrial type developments as there is a presumption against major development.

2.12 As well as a large area being designated as a National Park or AONB, the Joint Plan area contains numerous other important environmental and heritage designations. Large swathes of the Plan area, particularly the uplands, are designated at European level as a Special Area of Conservation for habitats or Special Protection Area for their importance to wildlife. There are also around 865km^2 of Sites of Special Scientific Interest, some of which are also subject to the European designations such as the River Derwent and Derwent Ings as well as five National Nature Reserves and 15 Local Nature Reserves. There are also many locally designated wildlife sites across the Plan area. This network of sites contributes to the overall biodiversity and geodiversity of the Plan area. Much of the woodland in the Joint Plan area is located in the North York Moors National Park, which has around 310km^2, and there is around 80 km^2 of ancient woodland in the Plan area. There are also many non-designated parts of the Plan area which are nevertheless very important for biodiversity, such as within towns and villages, on agricultural land or along road verges.

2.13 There is 361km^2 of Green Belt designated in the Joint Plan area around York, although the inner boundary is still to be defined. The general aim of Green Belt policy is to maintain open space around large urban areas, although the main purpose of the York Green Belt is to protect the historic character and setting of the City. Parts of the western fringe of Selby District fall within the West Yorkshire Green Belt.

2.14 Within the Joint Plan area there are 327 Conservation Areas, over 14,000 Listed Buildings and 1,605 Scheduled Monuments as well as thousands of other non-designated heritage assets. Fountains Abbey and Studley Royal World Heritage Site is also located in the Plan area. The relatively flat and low lying landscape of York allows for views of the Minster and the green wedges and strays are an important part of the setting of York. The City's status as an Area of Archaeological Importance recognises the value of the Minster, around 2000 listed structures and a number of scheduled monuments, including the city walls, Clifford's Tower and St Mary's Abbey. The cultural heritage of the North York Moors National Park was one of the reasons behind its designation and it contains a particularly high concentration of Scheduled Monuments.

2.15 Large parts of the lower lying areas covered by the Plan are at risk from flooding, particularly around York, Selby and the Vale of Pickering. Some parts, particularly around Northallerton, the area to the west of York, the area to the south of Selby and the southern parts of the North York Moors National Park are classified as Groundwater Source Protection Zones and most of the lower lying parts of the area are classified as Nitrate Vulnerable Zones, where water quality needs to be protected. In addition Principal Aquifers, which usually provide a high level of groundwater storage, have been designated in some locations. They may support water supply and/or river base flow on a strategic scale, and therefore need additional protection.

2.16 Air quality is generally good but a small number of urban locations have been designated as Air Quality Management Areas, including in Knaresborough, Ripon, Malton and three in York. The York AQMAs are based on breaches of health based objectives for nitrogen dioxide. Nitrogen dioxide is the result of emissions from a variety of different sources, however by far the main source is transport related emissions. As such, there is every possibly that the boundaries of the existing AQMAs may change over time (or indeed new AQMAs may be declared) as a consequence of more development across the city. The council has recently adopted a Low Emissions Strategy and is developing planning guidance to reduce the emissions impact of new developments.

2.17 The Plan area contains numerous opportunities for recreation and leisure including over 12,000km of public rights of way, many gardens, historic houses and castles, the historic city of York and the North York Moors National Park and is therefore important as a visitor destination.

2.18 Ecosystems services are the services provided by the natural environment which help to support human life. Ecosystems services provided by the Joint Plan area include food production, raw materials, recreation, landscape and aesthetic benefits, opportunities for carbon capture, pollination and climate and water regulation. Maintaining biodiversity is important in the provision of ecosystems services.

2.19 The assets referred to in the paragraphs above combine to create networks of green infrastructure across the Joint Plan area providing habitats for wildlife as well as opportunities for recreation.

Policy Context

National policy

2.20 The National Planning Policy Framework (NPPF) contains the Government's overarching policy on minerals planning. It contains a number of requirements relating to specific minerals types which are considered later in this document. The NPPF clearly identifies a need to ensure that a continuous supply of minerals is available to support the economy and states that great weight should be given to the economic benefits of minerals extraction but alongside this suggests that minerals should be used sustainably. The NPPF identifies a range of minerals that are of 'local and national importance' for which planning authorities should have policies. Minerals 'of local and national importance' of relevance to the Joint Plan area are aggregates, brickclay, silica sand, gypsum, salt, fluorspar, coal, gas, potash and building stone.

2.21 The NPPF sets out specific policy requirements in relation to a number of minerals. It requires the maintenance of landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock, 10 years for silica sand sites (more in some circumstances) and 25 years for clay sites. It also requires planning authorities to consider how to meet demand for minerals for the repair of historic assets.

2.22 In aiming to reduce the need to extract primary minerals and also find uses for waste materials, the NPPF requires planning authorities to take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials before considering extraction of primary materials. It also

places an emphasis upon safeguarding mineral resources for future use and safeguarding minerals infrastructure.

2.23 In relation to gathering appropriate evidence on minerals the NPPF states:

'Minerals Planning Authorities should work with other relevant organisations to use the best information to:

- Develop and maintain an understanding of the extent and location of mineral resources in their areas; and
- Assess the projected demand for their use, taking full account of opportunities to use materials from secondary and other sources which could provide suitable alternatives to primary minerals'.

2.24 These requirements have been addressed through the production of a range of evidence papers produced by or for each authority, as detailed in the Evidence Base section below.

2.25 The NPPF also places emphasis upon conserving important landscape and heritage assets by requiring that landbanks for non-energy minerals are provided for outside of National Parks, AONBs, Scheduled Monuments and World Heritage Sites, which is particularly relevant to the Plan as a relatively large proportion of the area is subject to such designations. In National Parks and AONBs many minerals and waste developments would be classed as 'major development' and should not be permitted except in exceptional circumstances as defined by a series of considerations known as the 'major development test' (see Glossary). It also requires that minerals developments have no unacceptable adverse impacts on the natural and historic environment. The NPPF advises that in considering planning applications substantial weight should be given to any harm to the Green Belt but also advises that minerals extraction is not considered to be inappropriate development within Green Belt, provided the development would not conflict with the purposes of including land within it. This is addressed further in Chapter 9 Development Management.

2.26 National waste planning policy is informed by European waste policy such as the Waste Framework Directive (2008) which introduced the concept of the Waste Hierarchy. The Landfill Directive (1999) is a key driving factor behind the diversion of waste from landfill and aims to reduce the negative effects of landfilling on the environment and human health. This Directive sets a 2020 target to reduce the total amount of biodegradable municipal waste sent to landfill by 35%, using 1995 as a baseline year. A further important consideration, relevant to planning for both waste and minerals, is the Climate Change Act and an associated requirement at a national level to reduce greenhouse gas emissions by 80% below 1990 levels by 2050.

2.27 The NPPF does not contain specific policies on planning for waste management although its policies remain generally relevant. A new National Waste Planning Policy was published in October 2014 and provides the specific national framework for waste planning. It operates alongside the Waste Management Plan for England and National Policy Statements for Waste Water and Hazardous Waste. The new policy requires that planning strategies help drive waste up the waste hierarchy, deliver sustainable development and resource efficiency, provide appropriate infrastructure, enable businesses and communities to take more responsibility for their own waste without harming human health or the environment, including protecting the Green Belt. The waste hierarchy, shown in Figure 3 below, places priority on the prevention of waste, followed by re-use, then recycling, then other

recovery (which can include recovering energy from waste) and finally disposal as a last resort.

Figure 3: Waste hierarchy (Defra, Government Review of Waste Policy 2011)

2.28 Waste planning authorities are required to identify sites and areas for new or enhanced waste management facilities for the management of the waste needs in their areas. In identifying suitable sites and areas waste planning authorities should identify the broad type or types of waste management facility that would be appropriately located on the allocated site or area, plan for the disposal of waste and recovery of mixed municipal waste in line with the proximity principle, consider opportunities for on-site management of waste where it arises and look for opportunities to co-locate facilities with complementary activities. The new national policy indicates that planning authorities should first look outside the Green Belt for suitable sites and areas for waste facilities which, if located in the Green Belt, would be inappropriate development.

2.29 It also places greater emphasis on considering needs for waste management capacity of more than local significance, and on joint working between waste planning authorities to provide a suitable network of facilities through considering waste arising across neighbouring authority areas.

Local Policy and Strategies

2.30 The key relevant local policy documents forming part of the evidence base for the Plan can be viewed at www.northyorks.gov.uk/mwevidence.

Municipal Waste Management Strategies

2.31 The waste management authorities covering the Joint Plan area (NYCC, CYC and Redcar and Cleveland Borough Council[4]) set out the approach to management of municipal waste (now often referred to as local authority collected waste) over forthcoming years. Only a small part of the North York Moors National Park lies within Redcar and Cleveland Borough and the local authority collected waste generated within that area has been considered as part of the Tees Valley Minerals and Waste Core Strategy.

[4] See footnote 2 for an explanation of the role of Redcar and Cleveland Borough Council in the Plan area.

2.32 The most relevant strategy for the Plan is therefore the Municipal Waste Management Strategy for the City of York and North Yorkshire. This was adopted in 2006 and sets targets and policies for the period up to 2026. The strategy's objectives and targets are:

- To reduce the amount of waste produced in York and North Yorkshire to make us one of the best performing areas in the country by 2013
- To promote the value of waste as a natural and viable resource by:
  - Re-using, recycling and composting the maximum practicable amount of household waste;
  - Maximising opportunities for re-use of unwanted items and waste by working closely with community and other groups;
  - Maximising the recovery of materials and/or energy from waste that is not re-used, recycled or composted so as to further reduce the amount of waste sent to landfill.

2.33 With regard to recycling and composting the strategy aims to achieve the following targets as a minimum:

- Recycle or compost 45% of household waste by 2013
- Recycle or compost 50% of household waste by 2020

In addition to the targets above the strategy also sets a target to, as a minimum:

- Divert 75% of municipal waste from landfill by 2013.

2.34 These targets are considered in more detail and in relation to current performance and future requirements in Chapter 6 of this document.

Local Plans

2.35 CYC is a 'unitary planning authority' while the National Park is the 'sole planning authority', meaning that they are the only planning authority for their areas and are therefore responsible for local planning (e.g. housing, employment uses, etc.) as well as minerals and waste planning[5]. The Joint Plan will operate alongside the wider planning policies for these areas which will also be factors in determining minerals and waste planning applications.

2.36 Since the production of the CYC Preferred Options Local Plan, the Council have produced a draft Publication Local Plan (September 2014). This was taken to Members of the Local Plan Working Group and Cabinet in September 2014. Following this, on 9th October 2014 full Council requested further work in relation to housing requirements in the Plan. The overarching draft policy, setting out the main principles for planning in York, is draft Policy SS1 which states that '...York fulfils its role as a key economic driver within both the Leeds City Region and York and North Yorkshire Sub Region'. Policy WM1 on sustainable waste management sets out the proposed strategic approach to waste management including managing municipal waste through mechanical treatment, anaerobic digestion and energy from waste, safeguarding existing waste management facilities, identifying sustainable locations for new waste management facilities, co-locating with other appropriate uses and providing opportunities to manage waste on-site. Policy WM2 proposes safeguarding mineral resources and infrastructure and identifying sites for extraction if needed. As the York Local Plan is still under preparation its progress, including the definition of a permanent Green Belt for York, will be reflected within subsequent

[5] The National Park Authority is defined as the 'sole planning authority' for the National Park in the 1995 Environment Act.

documents produced in relation to the Joint Plan. York Green Belt has been established for many years but has never been formally adopted. Whilst the Regional Strategy for Yorkshire and Humber has otherwise been revoked, its York Green Belt policies have been saved together with the key diagram which illustrates those policies and the general extent of the Green Belt around York. [6]

2.37 NYMNPA adopted its Core Strategy and Development Policies in 2008. This contains strategic planning policies as well as development management policies. The minerals and waste policies (Core Policy E and Core Policy F) will be replaced by the Joint Plan, however all other policies will remain in place pending the preparation of a new Local Plan for the National Park. Of particular relevance is Core Policy A which sets the overall principles for development in the National Park, and aims to 'further the National Park purposes and duty by encouraging a more sustainable future for the Park and its communities whilst conserving and enhancing the Park's special qualities'. Of further relevance to the Plan and the supply of minerals are the conservation and design policies which specify that the use of the correct materials is important in ensuring new development can be assimilated into the landscape.

2.38 The development plans of local planning authorities within and around the Joint Plan area set out future requirements for housing and employment development, including through allocations of land for such uses, as well as identifying major building projects in the area. Some of these plans are still at a draft stage. Economic growth and new building is linked to demand for minerals and the generation of waste. It is therefore important to understand the likely scale of development which may take place over the plan period. An analysis of current housing requirements reveals that there are plans for more than 2,591 new houses per annum[7]. Housing growth is also expected to be linked to additional development such as for employment purposes and a range of social and economic infrastructure. In addition, major infrastructure projects, some of which are planned for at a national level, such as the High Speed 2 rail line, the proposed gas fired power station near Knottingley and the White Rose carbon capture project may, if developed, also generate demand for minerals. Specific figures for new housing growth and employment land are likely to change over time as new or revised local plans are prepared.

2.39 The information above nevertheless suggests that the Plan should support the continued supply of minerals in order to meet local development and economic needs. The scale of new development expected within the Joint Plan area will also have a bearing on the range, and scale of waste management capacity and facilities that should be planned for, and this has been considered in the waste arisings and capacity work which is discussed below.

Sustainable Communities Strategies

2.40 The North Yorkshire Sustainable Community Strategy is produced by the Chief Executives Group North Yorkshire and York and Local Government North Yorkshire and York Partnership Group, an organisation comprising a range of public, private and voluntary sector bodies. The North Yorkshire Community Plan relates to the period 2014-2017 and sets out three key priorities for the Partnership to focus on over the next three years. These are to:

[6] The Regional Strategy for Yorkshire and Humber (Partial Revocation) Order 2013 came into force on 22nd February 2013.
[7] Draft York, North Yorkshire and East Riding Spatial Plan (June 2015) Note – the City of York figures are yet to be confirmed and are not included within this figure.

- facilitate the development of key housing and employment sites across North Yorkshire by delivering necessary infrastructure investments through partnership;
- support and enable North Yorkshire communities to have greater capacity to shape and deliver the services they need and to enhance their resilience in a changing world; and
- reduce health inequalities across North Yorkshire.

2.41 The City of York Council's Strategic Plan, 'The Strategy for York 2011 – 2025', was produced by the Without Walls partnership of public, voluntary and business organisations. The guiding principles of the strategy are focused on 'inclusion and enrichment' and 'reducing our environmental impact.' The long term objective is 'York will be a leading sustainable city by demonstrating strong performance in tackling climate change, resource efficiency, environmental protection and enhancement (natural and built environments), sustainable transport and quality of life for all, and whilst respecting its special qualities and capacity for growth accordingly'.

North York Moors National Park Management Plan

2.42 National Park Authorities must produce a National Park Management Plan setting out the vision, aims and policies for the management of the National Park. Planning Practice Guidance on the natural environment states that, although not part of the statutory development plan, National Park Management Plans may be material considerations when determining planning applications. The North York Moors National Park Management Plan was adopted in 2012. Within the context of delivering the statutory National Park purposes, the plan focuses upon the Park's ecosystem services, setting out a strategy to conserve and enhance the National Park's special qualities and improve habitat networks whilst at the same time supporting new woodland, increased agricultural production, more visitors and renewable energy generation. The Plan aims to protect the Park's landscape, biodiversity, natural and historic environment and tranquil areas, provide opportunities for enjoying and understanding the Park's special qualities, promote the North York Moors brand and support the local economy. It contains a policy which aims to reduce the amount of waste generated and increase the amount of waste which is re-used or recycled.

Strategic Economic Plan

2.43 The Strategic Economic Plan for North Yorkshire, City of York and the East Riding was published by the Local Enterprise Partnership (LEP) for the area in March 2014. In addition to setting out a vision for the area to become 'a thriving prosperous place where businesses are growing in size, number and long term profitability', the Strategy identifies a number of matters of more specific relevance to the Minerals and Waste Joint Plan. These include a focus on the area becoming a 'UK leader in food manufacturing, agriculture and biorenewables', and 'Driving Growth in our towns and the City of York'. The Strategy recognises a strong connection between food and agriculture and natural resources, especially biorenewables, for example using farm waste to produce energy through anaerobic digestion. It also indicates an intention to focus strategic investment in growth towns identified within the area's local plans, as well as development in the City of York to support its ambition to be a top 5 UK City. In smaller towns and rural areas the focus is on locally led economic development. The Strategy makes specific reference to the inward investment

potential of the proposed potash mine in the North York Moors National Park, as well as the biomass and carbon capture and storage proposals at Drax power station. Specific messages of relevance to the MWJP are:

- Ambition to: create 20,000 jobs; generate £3 billion growth; major investment in agri-tech and bio-renewables and double the rate of house building.
- £1billion generated annually in exports from the proposed potash mine.
- Potential for sustainable energy and resource efficiency in farm and food businesses - this includes producing energy from waste with significant investment already made in this technology within the area, as well as an overall aim to grow the bio-economy by 40%.
- Support for investment in energy and resource efficiency, turning waste into a resource of renewable energy and income stream, with the overall outcome to achieve a reduction in waste and carbon emissions.

2.44 The southern part of the Joint Plan area (Craven, Harrogate, York and Selby council areas) also falls within the Leeds City Region Local Enterprise Partnership Area. The Leeds City Region Strategic Economic Plan (March 2014) sets out four strategic priorities: Supporting business and enterprise; Enabling a skilled and flexible workforce; Fostering a low carbon, sustainable economy; and, Creating the infrastructure for growth.

2.45 Although only a small part of the Joint Plan area falls within in the Tees Valley Local Economic Partnership area, managed by Tees Valley Unlimited, it is still important to consider the influence which may occur due to economic growth from outside the Plan area. The Strategic Economic Plan, published May 2014, contains a number of ambitions relevant to the MWJP, including; to drive the transition to a High Value Low Carbon economy, focused on renewable energy, new technology, biological feed stocks and reduction in carbon foot print of existing industries, a growing demand for advanced manufacturing products and services with potential to exploit the restructuring of domestic energy and environmental markets, onshore and off shore low carbon opportunities, energy from waste and the potential to exploit shale gas, and leading the way in energy from waste.

Climate Change

2.46 Addressing the causes and effects of climate change, and contributing to wider targets, is being taken forward through a number of local strategies. The City of York Council approved a Climate Change Framework and accompanying Action Plan in 2010 to ensure that, over time, York accelerates actions to reduce carbon emissions. It commits the City to a 40% reduction in CO^2 emissions by 2020 (based on a 2005 baseline) and an 80% reduction by 2050 (based on a 1990 baseline). It also commits the City to making full use of the potential for low carbon, renewable and localised sources of energy generation and highlights 10 key issues for the City to focus on, including sustainable planning and waste management. North Yorkshire County Council's Climate Change Strategy aims to reduce the impact of climate change across North Yorkshire by firstly looking at its own services and operations and secondly working with partners to support the wider community of North Yorkshire to reduce the impact on climate change. Mitigating and adapting to climate change is identified as one of the key pressures for change in the North York Moors National Park Management Plan and is integral to many of its policies and actions. A range of work is taking place alongside preparation of the Plan to help ensure that

these issues are taken into account, including a Sustainability Appraisal incorporating Strategic Flood Risk Assessment.

Evidence Base

2.47 Key documents used in preparing the draft Plan are listed below and are available at www.northyorks.gov.uk/mwevidence. The conclusions and key messages arising from these documents informed the generation of options for the Plan and are considered in more detail where relevant throughout this consultation document.

Minerals and Waste Joint Plan Evidence Base and Technical Papers

2.48 Each of the Joint Plan Authorities has produced Minerals and Waste Evidence Base and Technical Papers relating to their area. These provide a detailed account of the geological distribution, technical properties and uses, historic and current activity and policy framework for each mineral in each planning authority area. Evidence base papers relating to economic and environmental aspects of the Plan area, as well as on a number of other specific topics, have also been produced on a joint basis. Some of the main ones are identified below.

Local Aggregates Assessment

2.49 All minerals planning authorities are required to produce a Local Aggregates Assessment (LAA). This must be based on a rolling average of 10 years sales data and other relevant local information and include an assessment of all supply options for aggregate minerals (including marine dredged, secondary and recycled sources). The Joint Plan authorities, along with the Yorkshire Dales National Park Authority, published their first Local Aggregates Assessment in March 2013, with a draft revised LAA being subject to initial consultation in May 2014. A third review was carried out with updated information, including a revised approach to forecasting future demand for aggregate, leading to a further revised LAA being produced in 2015. Specific findings of the LAA are considered within the aggregate minerals sections in Chapter 5.

Marine Dredged Sand and Gravel

2.50 The minerals planning authorities in the Yorkshire and Humber area appointed consultants (URS Environment and Infrastructure UK Ltd) to assess the extent to which off shore sand and gravel resources could contribute increased supply to the area, which could have implications for the amount of sand and gravel required to be supplied from land-based quarries. This is identified in the Local Aggregate Assessment (see above) as a matter which needs to be kept under review. The report published in January 2014 suggests that there is potential for a significant increase in supply of marine aggregate into the Yorkshire and Humber area, but that this is unlikely to occur in the short term (within 5 years), whereas over the medium to long term, particularly the latter, there is potential to provide a significant increase in supply subject to additional investment in existing and new infrastructure being made. A shift in supply towards marine sources is relevant to the Plan area because of the potential implications for sand and gravel supply requirements from land won resources in North Yorkshire, although it is considered unlikely to have a substantial impact over the current Plan period.

Minerals Safeguarding Studies

2.51 The National Planning Policy Framework requires planning authorities to define Minerals Safeguarding Areas, to protect resources from sterilisation by other forms of development. British Geological Survey was commissioned to carry out work to identify Mineral Safeguarding Areas within the Joint Plan area. The outcome of the work has been used to help inform the approach to Mineral Safeguarding taken within the Plan.

Updated sand and gravel assessment

2.52 As part of the work on minerals safeguarding, a re-assessment of the distribution of potentially viable sand and gravel resources in the area was also undertaken by British Geological Survey on behalf of NYCC and CYC. This has identified a revised (and reduced) overall distribution of potential resources and will form the basis for identification of safeguarding areas for sand and gravel, as well as assisting with the identification of locations for future development.

Waste Arisings and Projections

2.53 The Joint Plan authorities commissioned consultants Urban Vision to provide evidence in relation to waste arisings and capacity for the Joint Plan authority areas. The Yorkshire Dales National Park Authority was also involved and information relating to the Yorkshire Dales National Park forms part of the outputs.

2.54 The work provides an assessment of likely future arisings to 2030 in relation to local authority collected waste[8], commercial and industrial waste, construction, demolition and excavation waste, hazardous waste, agricultural waste, local level non-nuclear radioactive waste and waste water / sewage sludge. These projections are set within the context of varying growth scenarios. The work identifies the available capacity of existing and permitted waste management facilities and any potential 'gap' between existing capacity and capacity likely to be required over the plan period. The work and its conclusions are discussed in Chapter 6.

Identification of opportunity locations for waste facilities study

2.55 This project, undertaken for the three authorities by Fairhurst and Partners, adopted a systematic approach to the identification of locations such as existing and proposed industrial estates and employment land allocations which are likely to be suitable in principle to host built waste management facilities. The main purpose of this project was to gain a clearer understanding of the potential for delivery of new waste infrastructure if needed in order to meet expected future capacity requirements.

Managing Landscape Change project

2.56 This study was commissioned by NYCC, prior to commencement of work on the Joint Plan, with funding from Historic England and adopts an integrated approach to the consideration of environment, landscape and historic environment issues in relation to areas of surface minerals resources. Whilst the study only covers the NYCC area, it also contains a range of more generic good practice advice on minerals site design, operation and reclamation which is likely to be of relevance to the Joint Plan area.

[8] The study does not generate new projections of arisings for LACW but incorporates projections already generated by the York and North Yorkshire Waste Management Partnership, who have responsibility for management of this waste stream, as these projections are considered to be robust

The study can be viewed at: http://www.northyorks.gov.uk/article/26667/Local-core-documents---managing-landscape-change-project-April-2012 .

Sustainability Appraisal

2.57 The Sustainability Appraisal will ensure that environmental, social and economic considerations are integrated into the production of the Plan. Sustainability Appraisal has been carried out on the vision, objectives and options and has informed the development of the Preferred Options. Sustainability Appraisal will also be carried out at the Publication stage of Plan production and its recommendations will be considered in further in finalising the Plan. The Sustainability Objectives, which will be used to assess the Plan, have arisen through consideration of the objectives of many plans, policies and programmes which are relevant to the Joint Plan area along with other considerations and have been agreed through consultation on the Scoping Report. This consultation took place alongside the initial consultation on the draft Plan in 2013, including two workshops with key stakeholders. The scoping report can be accessed here: www.northyorks.gov.uk/mwsustainability.

Mineral and Waste specific context

2.58 The purpose of this section is to provide more background to the development of the preferred policies. The content of this section is derived mainly from information in the evidence base for the Plan, which can be accessed at www.northyorks.gov.uk/mwevidence. More information on minerals and waste issues is contained in Chapters 5 and 6.

Minerals

2.59 Minerals are important as they provide many of the raw materials necessary for construction, energy and industry. They are therefore essential in helping to sustain economic growth. For these reasons, Government attaches importance to planning for their supply, whilst at the same time requiring that the impacts of extracting them are kept within acceptable limits. An important consideration in planning for minerals is that they can only be worked where they occur in sufficient quantity and quality and this fundamental geological constraint will always be a key influence on minerals planning. A range of mineral types exist within the Plan area, as shown in Figures 4 and 5 below.

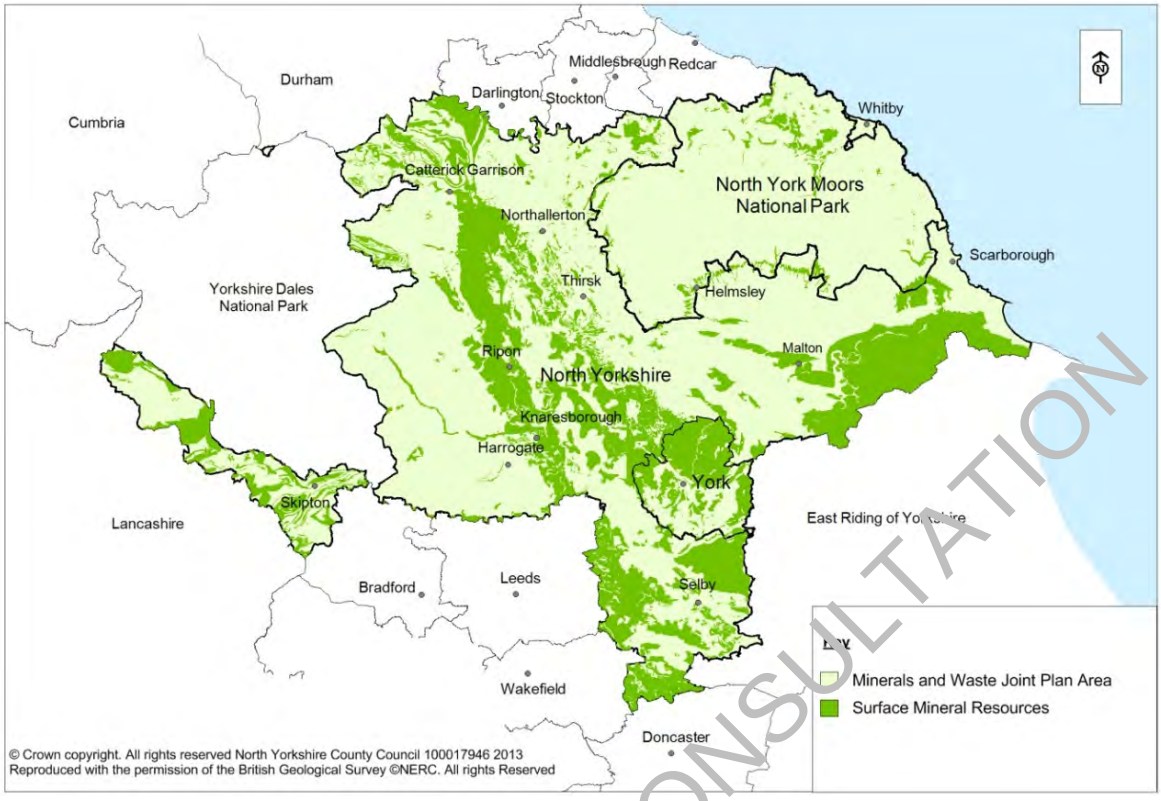


Figure 4: Distribution of surface mineral resources within the Joint Plan area

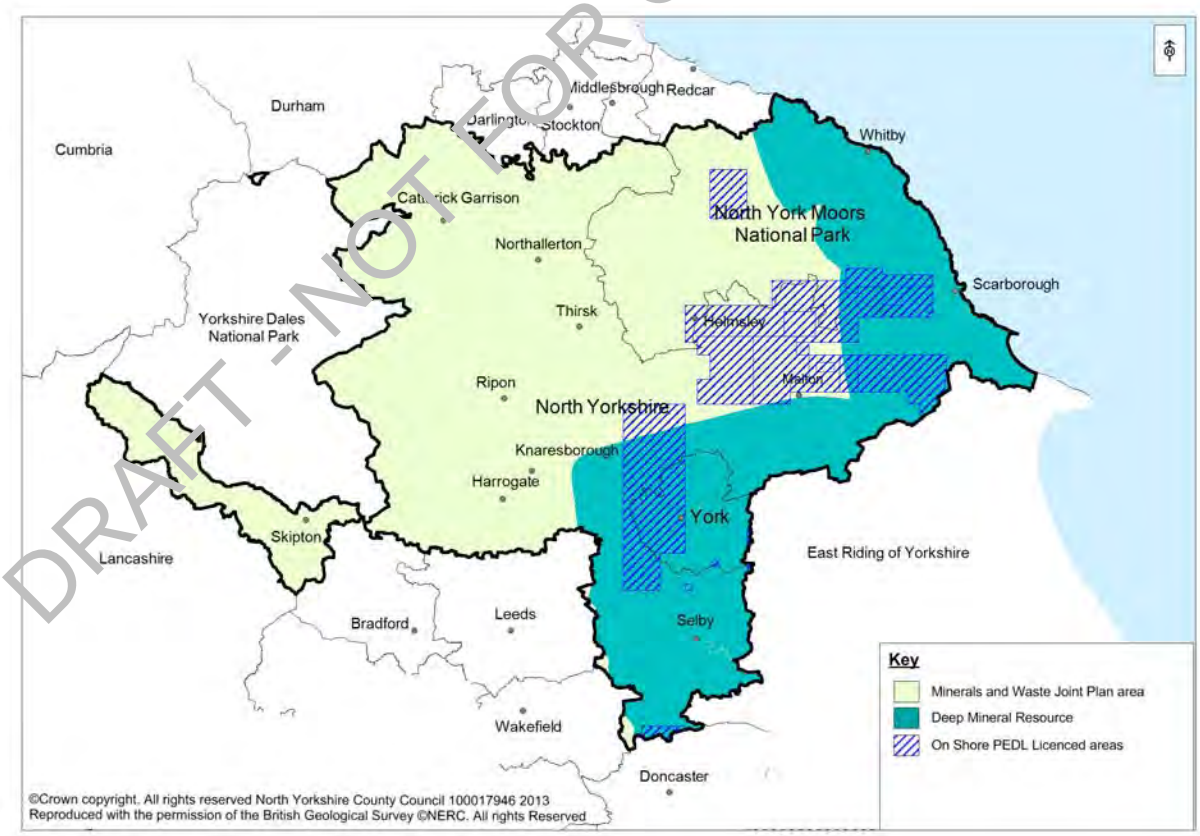


Figure 5: Distribution of underground mineral resources

2.60 Despite this relatively broad distribution of resources, there is currently a focus on extracting minerals in particular locations where the quarrying industry is well established and infrastructure exists to help process minerals and transport them to markets. This has resulted in the existence of concentrations of working in certain parts of the Joint Plan area such as the valleys of the Rivers Swale and Ure, the western and southern parts of Selby District and in parts of Ryedale District in the eastern part of the Plan area. Most current mineral workings are in the NYCC part of the Plan area, although an important exception to this is Boulby potash mine, located in the northern part of the North York Moors National Park.

2.61 With over 50 working quarries, the Joint Plan area is a significant producer of minerals at a regional and, in some instances, national scale. Aggregate minerals (sand and gravel and crushed rock) are particularly important, with the Joint Plan area being the largest supplier of concreting sand and gravel within Yorkshire and Humber, all of which is extracted in the NYCC area. Other important minerals include coal (Kellingley Colliery in NYCC is one of only a small number of active coal mines remaining in the country although it is due to close at the end of 2015), potash (Boulby Mine in the North York Moors National Park is the UKs only potash mine) and silica sand, which is a scarce and nationally significant mineral worked on a relatively small scale at Burythorpe Quarry in the NYCC area. Onshore gas is exploited in the Vale of Pickering, in one of the UK's largest onshore conventional gas fields, and approval has recently been given for extraction from a well at Ebberston in the North York Moors National Park. Other minerals quarried on a smaller scale are clay and building stone, which are worked mainly in the NYCC area, although two building stone quarries exist in the National Park.

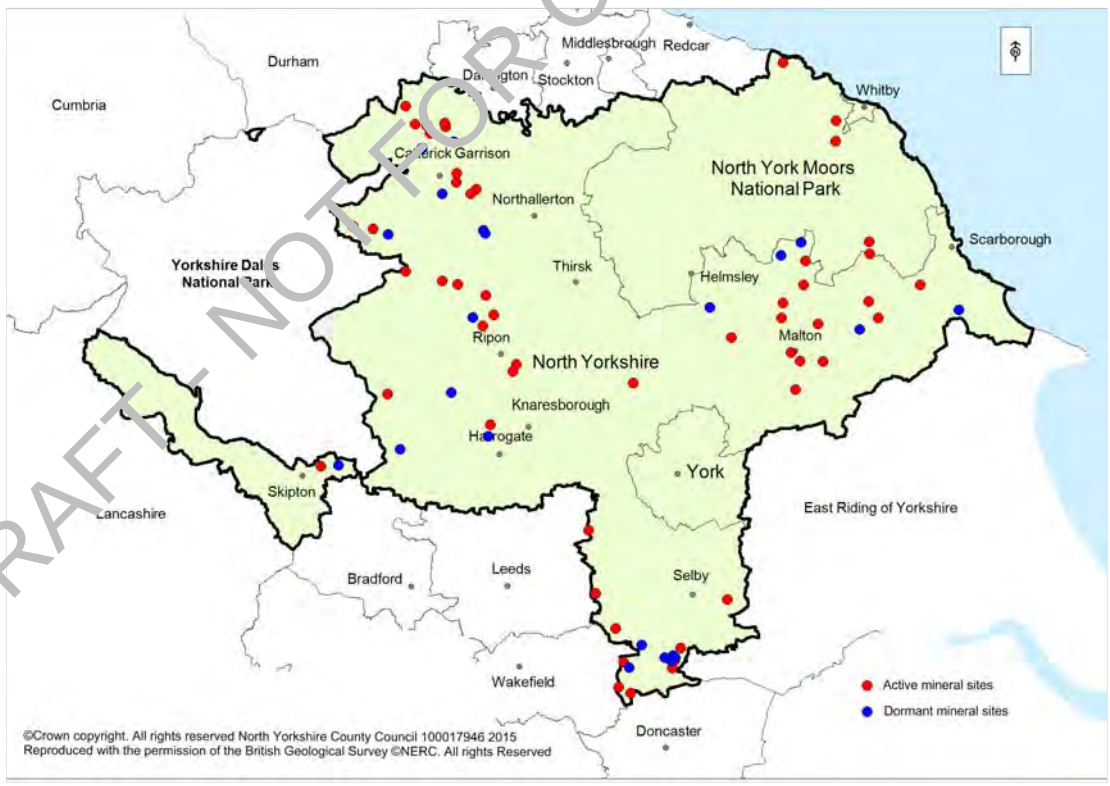


Figure 6: Distribution of active and dormant quarries in the Joint Plan area

2.62 In addition to these 'primary' minerals resources of commercial significance, the Joint Plan area is also a supplier of secondary aggregate, in the form of colliery spoil and waste ash from power stations, both of which are located in Selby District. The area also produces recycled aggregate from construction and demolition waste. These

are both important sources of supply as they can act as more sustainable alternatives to the extraction of primary resources

2.63 As well as quarries and mines, the area contains a range of other infrastructure associated with the supply of minerals. These include plant for the manufacture of concrete and coated roadstone and the production of blocks made from aggregate, as well as facilities used or with potential for use to help transport aggregate, such as rail heads and river wharves. This infrastructure is important as it helps ensure that minerals can be supplied in forms which the market requires and to the locations where it is needed. The large majority of this infrastructure is located within the NYCC area.

2.64 Markets for minerals are not restricted by administrative boundaries and evidence indicates that a number of export and import movements occur. Although predominantly rural, the area is located between major urban areas to the south and north (West and South Yorkshire and Teesside respectively) and it is therefore not surprising that minerals are transported into these areas, where demand tends to be greater than in more rural locations and there are known supply constraints. Information about minerals movements is not available in full detail but we know that, in recent years, about one-third of all the sand and gravel produced in the area has been transported into the North East Region, mainly Teesside and about one quarter into West and South Yorkshire. Similarly, only around half of the crushed rock produced in the Joint Plan area has been used in the area, with significant amounts transported to West and South Yorkshire and the former Humberside area.

2.65 Less information is available for other minerals but it is understood from the mine operator that around a third of potash produced from the Boulby potash mine is exported from the UK. Smaller scale known exports from the Joint Plan area include silica sand, which has a national market, secondary aggregate and gas extracted in the Vale of Pickering, which is used to generate power and fed into the national grid. Most of the building stone worked in the area is sold locally, although some is known to have served more distant markets, including Scotland. Coal worked at Kellingley Colliery is used at local power stations such as Drax, Eggborough and Ferrybridge. Clay is used mainly at local manufacturing facilities within the Joint Plan area.

2.66 The overall scale of imports of minerals is understood to be relatively small compared with total consumption, although data is limited. Known imports include aggregate from the Yorkshire Dales National Park, North East Region, Cumbria, Wakefield, Doncaster, the East Riding and Derbyshire. Silica sand is also imported as a raw material for a glass manufacturing plant near Selby. These imports are thought to relate mainly to minerals which meet specifications which cannot be provided from within the Plan area, or where local market conditions exist near the boundaries of the area.

2.67 Transport of minerals within the Joint Plan area is mainly by road. Some rail transport occurs in Selby District for the movement of coal from Kellingley Colliery to the power stations and potash extracted from Boulby mine is transported by rail, whilst gas is transported by pipeline. Some minerals are imported into the Joint Plan area by rail, but again, this is currently limited to Selby district.

2.68 Continued availability of reserves of some minerals (such as sand and gravel and clay) is under pressure, with current reserves expected to run out during the Plan period in the absence of new permissions. By comparison, the current supply situation for other minerals, such as crushed rock, coal and potash is relatively healthy. It is likely that there will be a need to make significant new provision for

sand and gravel working in particular, if security of supply in accordance with current arrangements is to be maintained.

2.69 Since consultation at Issues and Options stage there has been an increased focus on the potential for development of shale gas resources in the Plan area. Third Energy announced in November 2014 an intention to submit a planning application for appraisal of potential shale gas reserves at a site near Kirkby Misperton, in the eastern part of the Plan area. An application was submitted in July 2015. In August the first tranche of new licence blocks, which do not require any further environmental assessment under the conservation of habitats and species regulations 2010, was announced in response to the 14th onshore oil and gas licensing round. A second tranche will be announced later this year and is likely to lead to further interest in resources in the Plan area.

2.70 In June 2015 the North York Moors National Park Authority resolved to grant, subject to completion of a legal agreement, permission for development of a major new polyhalite mine in the north eastern part of the National Park.

2.71 Whilst planning for the future supply of minerals is clearly important, there is also a need to ensure that other aspects of the Joint Plan area that are highly valued, such as its high quality landscapes and natural, built and historic environment (which includes the North York Moors National Park and AONBs and the historic core of York), its local communities and businesses, are protected from any harmful effects of minerals working and transport.

Waste

2.72 Dealing with waste is a major challenge for society and needs to be addressed alongside other initiatives to improve the sustainability of our environment and economy. Many items discarded as waste have the potential to be re-used, recycled or used as a resource. Managing waste in these ways has benefits in reducing the amount of natural resources that are consumed. For example re-using or recycling materials generated during demolition activity can reduce the need for extraction of new minerals. At the same time, it can reduce the need for landfilling of waste, which is itself an inherently unsustainable practise in many circumstances. Treating waste as a resource can also lead to new opportunities for the economy, with the outputs of modern waste management processes acting as inputs to businesses which can use them. The management of waste can be relatively energy and resource intensive, including through transportation requirements and also through certain waste management practices themselves. In recent years there has been rapid change in the policy and regulatory context for waste management, as well as in the means by which waste is being managed, and this is expected to continue over the plan period.

2.73 Waste arises from a wide range of domestic, commercial and industrial activities. The main waste types (streams) arising within the Joint Plan area include:

- Local Authority Collected Waste[9] (LACW, which includes Household waste and other similar wastes collected by the Local Authorities)
- Commercial and industrial waste (C&I)
- Construction, demolition and excavation waste (CDEW)
- Hazardous waste

[9] Recent re-definition of municipal waste to include other similar wastes collected by local authorities (such as waste from businesses previously counted as Commercial and Industrial waste) has led to the term Local Authority Collected Waste becoming a more accurate description

- Agricultural waste
- Low level (non-nuclear) radioactive waste (LLRW)
- Waste Water.

2.74 LACW, C&I and CDEW are the three main types which need to be considered in the Plan, although it is intended that the Plan should contain appropriate policy in relation to the other important waste streams known to arise. Of the three main streams, C&I waste is the most significant by volume in the Joint Plan area.

2.75 The amount and type of waste produced, and the ways in which it is managed, partly reflects the environmental, social and economic characteristics of the area. Concentrations of population and commercial/industrial activity, such as in the City of York and the towns of Harrogate and Scarborough, along with industrial activity in the Selby area, are the largest producers of waste and this tends to be reflected in the overall pattern of waste management facilities. However, large parts of the area are also highly rural, with population and development sparsely distributed. Amounts of waste generated in these areas are likely to be lower (with the exception of agricultural waste) but managing waste in such areas can present challenges as arisings are more dispersed and significant transport of waste may be needed if local facilities cannot be provided.

2.76 The majority of waste in the Joint Plan area has, historically, been disposed of through landfill and this continues to be the case today for some waste types. This is partly due to the fact that parts of the area have a high number of quarries which traditionally have been restored via landfill and landfill has been a relatively cheap means of dealing with waste. However, in line with the waste hierarchy[10], current national policy seeks to change this position and deliver substantially greater levels of re-use, recycling and recovery of waste, such that only 'residual' waste (i.e. that which cannot be re-used, recycled or composted or put to beneficial use in some other way) is disposed of. The Government defines such a position as a 'zero waste economy'.

2.77 In addition to increased re-use, recycling and composting of waste, alternative methods of dealing with residual waste have been developed, including technologies such as mechanical and biological treatment, anaerobic digestion, incineration with energy recovery and advanced thermal treatment processes such as pyrolysis and gasification. Some of these (such as anaerobic digestion and incineration with energy recovery) are well established in the UK on a commercial scale. Others, such as pyrolysis and gasification technologies, are less well established.

2.78 There are many organisations involved in the overall process of dealing with waste and the actions of individuals are important too. The three waste planning authorities have a particular responsibility to ensure that up to date planning policies are in place to help support the more sustainable management of waste. This can include setting out the overall scale, location and nature of waste management capacity that is likely to be needed in the area over the next 15 years, as well as policies to ensure that any proposals for new waste facilities can be developed without unacceptable impact on communities, businesses and the environment.

2.79 It is not the role of the Plan to specify how waste is collected, or the detailed processes and technologies by which it must be managed. These are mainly matters

[10] The Waste Hierarchy is a concept endorsed at all levels of planning policy which places five categories of waste management in their order of priority: Prevention, Preparing for Re-Use, Recycling, Other recovery, Disposal.

for business and, in the case of household and other similar waste, the District and County Councils, City of York Council and Redcar and Cleveland Borough Council in their capacity as waste collection authorities (district, borough and unitary councils) and waste disposal authorities (county and unitary councils). Figure 7 below shows the waste disposal authorities covering the Joint Plan area. Most of the waste arising in the North York Moors, and also the Yorkshire Dales National Park which is largely within North Yorkshire County, is managed outside the Parks but within the NYCC area, and this situation is expected to continue.

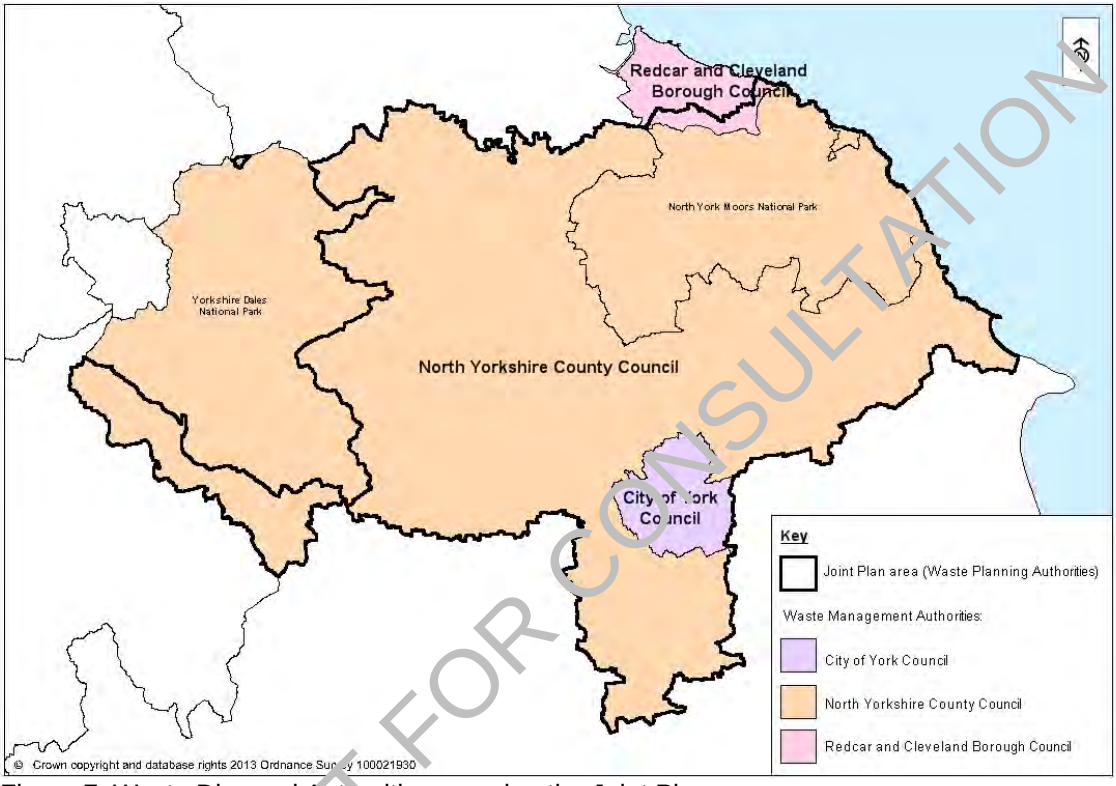


Figure 7: Waste Disposal Authorities covering the Joint Plan area.

2.80 Specific local targets for recycling, composting and diversion of household waste from landfill have been set by the York and North Yorkshire Waste Partnership (which comprises the seven District Councils in North Yorkshire together with the County Council and CYC). The northern part of the North York Moors National Park lies within Redcar and Cleveland Borough, with targets for waste management in this area set out in the Tees Valley Joint Waste Management Strategy. Whilst these matters are clearly of relevance to the Plan, as they may have implications for the general range and quantity of waste management capacity that may be needed in the area, they are identified separately from it.

2.81 The management of waste is not necessarily constrained by local authority boundaries. Although evidence is limited, it suggests that there are both imports and exports of waste across the North Yorkshire sub-region boundary, as well as imports of waste from the adjacent Yorkshire Dales National Park Authority area. Whilst some of these movements may be part of well-established patterns of waste management, other movements may take place in a more ad hoc way depending on shorter term commercial and market considerations. Previous or current patterns of movement may not necessarily continue in the future in response to a wide range of market and other considerations. This represents a considerable challenge to comprehensive planning for the management of waste and suggests a need for a degree of flexibility in the Plan.

Links between minerals and waste development

2.82 Whilst the above sections have focussed on the context for minerals and waste development separately, there are important links between the two. The efficient use of minerals, including the re-use of materials such as ash and spoil as alternatives to primary minerals, help reduce waste as well as conserving a natural resource. Quarries may have potential for the disposal of waste via landfill, as part of the reclamation process, in circumstances where any need for landfill capacity has been identified, and in some cases the disposal of inert waste via landfill can help improve the quality of derelict or degraded land. These links will need to be reflected in the content of the Plan.

2.83 Minerals and waste developments can also both have the potential for the delivery of benefits. For example through the careful design, operation and reclamation of mineral sites it may be practicable to provide enhancement of wildlife habitats, the provision of floodwater storage capacity or other environmental benefits, as well as helping to support local businesses and the economy, and some waste developments may be able to produce power or heat for use by local consumers.

2.84 Both forms of development, due to their nature, also have the potential to give rise to adverse impacts, for example on the landscape, through the impact of vehicle movements and the generation of noise or other forms of pollution. A key role for the Plan will be to develop planning policies which help deliver the maximum benefits from the development which may be needed, whilst ensuring that any harmful impacts are minimised through appropriate locations, design and operation.

Addressing the Duty to Cooperate

2.85 It is a legal requirement that local plans are prepared having regard to the statutory Duty to Cooperate on strategic cross boundary issues. Cooperation with a range of organisations, including other planning authorities and certain statutory bodies, is required where necessary. Both minerals and waste development can give rise to strategic matters of importance to more than one local authority area. The decision to prepare the Plan on a joint basis is itself a response to the requirements of the Duty, reflecting the benefits of a consistent and coordinated approach which acknowledges existing cross-boundary issues and relationships.

2.86 Development of the evidence base for the Plan, together with the outcome of a range of consultation activity, has identified a number of issues for which it will be necessary to cooperate with other bodies in order to ensure a coordinated approach. These include;

- Cross boundary movements of aggregate minerals, particularly exports to the West and South Yorkshire areas and to the Tees Valley and the implications of potential shortfalls in indigenous supply in West and South Yorkshire and the Tees Valley area.
- Cross boundary movements of waste, particularly exports of waste from the Plan area to a range of other WPA areas.
- Safeguarding of minerals and waste sites and infrastructure within the two tier parts of the Joint Plan area.

2.87 Cooperation with a wide range of relevant organisations has taken place in relation to the above matters, resulting in the following specific actions so far:

- Preparation of a joint Local Aggregates Assessment for the North Yorkshire sub-region to help establish the scale of future requirements for aggregates minerals
- Preparation of a joint evidence study on waste capacity needs for the North Yorkshire sub-region
- Preparation of draft memoranda of understanding with the Yorkshire Dales National Park Authority and Redcar and Cleveland Borough Council in relation to arrangements for the management of waste
- Liaison with a wide range of specific minerals and waste planning authorities in relation to identified cross boundary movements of minerals and/or waste
- Liaison with relevant prescribed bodies in relation to the development of policies for inclusion in the Plan.

2.88 It is expected that cooperation on these matters, and any other relevant matters that are identified, will continue through the remaining stages of preparation of the Plan. A background paper[11] summarising work undertaken so far relating to the Duty to Cooperate can be found in the evidence pages on the Joint Plan website.

Q01) Please tell us if you have any views on important cross boundary planning issues that should be addressed in the Plan or about the approach taken so far to planning for minerals and waste across local authority boundaries.

[11] Duty to Cooperate Summary Document for Preferred Options Stage

Chapter 3: Issues and Challenges

3.1 In order to plan for minerals and waste development, it is important to understand the relevant issues and challenges facing the area and the implications of these for the Plan.

3.2 The need to ensure relevant issues have been taken into account is reinforced through the NPPF which requires the Plan to be justified and based upon proportionate evidence.

3.3 The issues and challenges that the Plan should address have been identified through:

- Review of the NPPF, NPPG, the National Planning Policy for Waste and other relevant national policy
- Consideration of any relevant local policies and strategies, including local waste management strategies, Sustainable Communities Strategies and the North York Moors National Park Management Plan
- Review of factual, technical and independently sourced information contained in the evidence base
- Specific items of evidence produced to support the Plan
- Comments received as part of the Joint Plan First Consultation and Issues and Options Consultation (as well as previous consultations undertaken by NYCC prior to the decision to prepare a Plan on a joint basis).

Issues and Challenges Summary

3.4 Based upon available evidence, the issues and challenges considered to be of most significance to the Joint Plan are summarised below. These will be considered in more detail in Chapters 5 to 9 of this document.

Minerals

- Ensuring a continuity of supply of minerals, reflecting the likely levels of economic and housing growth and future requirements for minerals;
- Maintaining the required land banks for sand and gravel, crushed rock, silica sand and clay, but as far as practicable providing for these outside of the National Park and AONBs;
- Continuing to provide a supply of building stone for repair of traditional buildings and for new build;
- Considering how to address the potential positive and negative impacts of exploiting unconventional hydrocarbons resources such as shale gas as well as planning for conventional forms of energy minerals;
- Addressing commercial interest for a new potash mine in the National Park
- Encouraging the use of alternative sources of supply of aggregate such as secondary, recycled and marine aggregate where practicable over primary land won minerals extraction;
- Safeguarding important minerals resources and infrastructure from sterilisation by other uses;
- Ensuring there are sufficient safeguards in place to minimise the local impacts of minerals extraction on communities, the environment and other important assets;
- Providing for a range of enhancements, including ecological services and biodiversity, particularly through reclamation of workings; and

- Developing an appropriate locational strategy for minerals supply, taking account of cross-boundary supply issues where relevant.

Waste

- Promoting the management of waste further up the waste hierarchy i.e. reducing the amount going to landfill and providing facilities to enable the re-use, recycling, composting and recovery of waste, as well as supporting an overall reduction in the generation of waste;
- Supporting the delivery of the additional waste management capacity expected to be required, in line with any identified needs;
- Incorporating flexibility to reflect uncertainties resulting from waste data limitations and evolving technologies and practise;
- Developing an appropriate locational strategy for new waste management facilities, taking account of cross-boundary movements where relevant;
- Considering opportunities to co-locate waste management facilities with complementary uses;
- Ensuring there are sufficient safeguards in place to minimise the local impacts of waste management on communities, the environment and other important assets; and
- Safeguarding strategically important waste management infrastructure.

General

- Establishing policies which are appropriate across the diverse characteristics of the Joint Plan area;
- Developing an appropriate approach to the protection and enhancement of the Plan areas' important landscapes, and natural and heritage assets including the North York Moors National Park, AONBs and World Heritage Site, the historic city of York, numerous Conservation Areas, Sites of Special Scientific Interest, Special Areas of Conservation, Ramsar Sites, Special Protection Areas, Sites of Importance for Nature Conservation, Heritage Coast, Green Belt, nature reserves and listed buildings as well as the wide range of non-designated assets which are important for their own intrinsic value;
- Ensuring minerals and waste development contributes to and supports economic growth both within the Plan area and nationally, including the employment opportunities that they provide;
- Seeking to reduce carbon emissions, particularly in relation to the transportation of minerals and waste, promoting re-use and recycling of materials and recovery of energy from waste; and providing opportunities to assist in adapting to the effects of climate change, such as reducing flood risk and enhancing habitat connectivity;
- Considering accessibility to major transportation networks and sustainable transport infrastructure, recognising constraints on opportunities for the movement of minerals or waste;
- Recognising the potential for mutually beneficial links between minerals and waste activities, such as utilising specific waste streams in the sustainable restoration of mineral workings; and
- Ensuring an element of flexibility is built into the Plan.

Chapter 4: Vision and Objectives

4.1 Having a vision and objectives gives direction to the policies in the Plan and helps ensure it delivers what we want to achieve. This section sets out a draft vision and related objectives. It responds to the issues and challenges facing the area, as identified in the previous Chapter, which reflect the outcomes of public consultation to date, as well as the evidence base and the national policy context. In developing the vision and objectives for the Joint Plan, the outcomes of previous consultation on a vision and objectives for minerals and waste plans in the NYCC area have also been taken into account.

Vision and Priorities

Over the period to 2030 the Joint Plan area will move towards the more sustainable provision of minerals and waste infrastructure and services, maintaining a careful balance between meeting future needs whilst protecting and enhancing the Joint Plan area's environment, protecting and supporting its communities and strengthening its economy.

The following interconnected priorities underpin the vision and objectives:

- Delivering sustainable waste management
- Achieving the efficient use of minerals resources
- Optimising the spatial distribution of minerals and waste development
- Protecting and enhancing the environment, supporting communities and businesses and mitigating and adapting to climate change.

Delivering Sustainable Waste Management

i. Less waste will be being generated and the Joint Plan area will have moved substantially closer to a zero waste economy, with more waste being used as a resource and disposal of waste arising in the Joint Plan area only taking place as a last resort. National and local targets for recycling and diversion of waste will, as a minimum, have been met and, where practicable, exceeded. Important waste management infrastructure will have been safeguarded for the future and the Joint Plan area will have delivered sufficient waste management capacity to meet needs equivalent to waste arising in North Yorkshire and the City of York, with waste only being exported out of the Joint Plan area where necessary or more sustainable.

Achieving the Efficient Use of Minerals Resources

ii. Whilst maximising the use of alternatives to primary minerals, the provision of an adequate and steady supply of minerals will have been maintained, recognising the important role the Joint Plan area has in the supply of a range of minerals and in particular recognising the area's role in aggregates provision in the Yorkshire and Humber area and the adjacent North East region. Provision will have also reflected the importance of using local minerals to help maintain and improve the quality of the area's built environment. Important minerals resources and minerals supply infrastructure will have been safeguarded effectively for the future.

Optimising the Spatial Distribution of Minerals and Waste Development

iii. *Where geological and infrastructure considerations allow, opportunities to ensure a good match between locations of minerals supply and demand will have been taken, and appropriately located mineral workings will also be playing a role as locations for the re-use and/or recycling of construction and demolition and excavation waste.*

iv. *For both minerals and waste development, an adequate network of suitably scaled and sustainably located facilities will have been delivered in order to meet requirements identified in the Plan and the distribution of these will have had regard to the availability of adequate transportation networks, any opportunities for modal shift and the benefits of minimising the overall distance waste and minerals are transported.*

v. *Waste arising in both urban and rural areas will be being managed as near to where it arises as practicable, appropriate to the waste stream and scale of arisings, in order to provide a network of facilities accessible to local communities and businesses. New waste facilities in both urban and rural locations will, where practicable, have been co-located with complementary industries, businesses and producers or users of waste, in order to maximise the overall efficiency of waste management and the delivery of wider benefits to local businesses and the economy, including from the generation of heat and power through the recovery of waste.*

vi. *In identifying appropriate locations for the delivery of both minerals and waste development the distinguished natural, historic and cultural environment and unique and special landscapes of the Joint Plan area will have been protected, with particular protection afforded to the North York Moors National Park, the Areas of Outstanding Natural Beauty and the historic City of York.*

Protecting and Enhancing the Environment, Supporting Communities and Businesses and Mitigating and Adapting to Climate Change

vii. *Minerals and waste development will be taking place in accordance with the highest practicable standards of design, operation and mitigation throughout the life of the development in order to ensure that the amenity of local communities, the sustainability of local businesses and the high quality environment of the Joint Plan area are given robust protection. Liaison between developers and local communities, businesses, regulators and landowners will have been key in delivering this.*

viii. *Improved efficiency in energy and resource use, including increased use of alternatives to primary minerals and appropriate design and mitigation to address effects on, and from, climate change, including reducing the carbon footprint associated with minerals and waste and reducing flooding will have occurred, and a high standard of reclamation and afteruse of minerals and waste sites will be being delivered, providing a range of benefits for local communities and the environment of the area, including connecting habitats and enhancing biodiversity as well as protecting and restoring agricultural land.*

Sustainability Appraisal

The vision has been assessed as contributing to beneficial impacts on the environment, economy and communities in the Plan area. Potential positive impacts have been identified in relation to the natural and historic environment objectives, landscape, climate change, the economy and protecting communities and their health and wellbeing. In addition, potentially strong positive impacts are identified in relation to minimising the use of resources, transport, soils and land, biodiversity and geo-diversity, managing waste more sustainably, mitigating and adapting to climate change and enabling the supply of minerals to support the needs of the population. No negative impacts have been identified, primarily due to the vision being an overarching set of aspirations for the Plan.

Q02) Do you agree with the vision presented above? If not how can it be improved?

Objectives

4.2 Based on the proposed Vision and the priorities identified above, the following objectives are proposed as a means of taking them forward. They are split into four groups reflecting the interconnected priorities.

Delivering sustainable waste management

Objective 1	Encouraging the management of waste further up the hierarchy
Background explanation supporting the objective.	This includes supporting the efficient use of materials in the design and construction of development and supporting a reduction in the amount of waste generated by individuals and organisations; delivering national and local targets for recycling, composting and diversion of waste from landfill; using waste as a resource; incinerating waste without effective energy recovery and disposing of waste via landfill only as a last resort or to ensure that landfill sites or quarries are restored to beneficial use, and; building appropriate links between waste and minerals policy.

Objective 2	Making adequate provision for the waste management capacity needed to manage waste arising within the sub-region
Background explanation supporting the objective.	This includes planning for the delivery, where practicable, of the new waste management infrastructure needed to manage a level of arisings equivalent to the anticipated future arisings of waste in the Joint Plan area, including arisings of Local Authority Collected Waste arising within the adjacent Yorkshire Dales National Park Authority area, and; safeguarding and supporting the best use of important waste management infrastructure and ensuring appropriate co-ordination with District and Borough Councils in North Yorkshire to ensure a joined-up approach to safeguarding. It also helps support the contribution of the waste industry to the local and wider economy.

Achieving the efficient use of minerals resources

Objective 3	Safeguarding important minerals resources and minerals infrastructure for the future
Background explanation supporting the objective.	This includes safeguarding relevant surface and underground minerals resources of national and local importance, important aggregates supply and transport infrastructure such as railheads, wharfs, roadstone coating and concrete plants; and ensuring appropriate co-ordination with District and Borough Councils in North Yorkshire to ensure a joined-up approach to safeguarding.

Objective 4	**Prioritising the long-term conservation of minerals through facilitating provision of sustainable alternatives to primary minerals extraction, including increasing the re-use and recycling of minerals and the use of secondary aggregates**
Background explanation supporting the objective.	This includes identifying an appropriate local contribution from alternative sources to primary land won minerals; supporting the development of such alternative sources in appropriate locations; encouraging the efficient use of minerals resources through the sustainable design and construction of new development; and building appropriate policy links between minerals and waste policy.

Objective 5	**Planning for the steady and adequate supply of the minerals needed to contribute to local and wider economic growth, development, quality of life, local distinctiveness and energy requirements, within the principles of sustainable development**
Background explanation supporting the objective.	This includes identifying and maintaining future supply requirements for minerals, in line with national planning policy and the North Yorkshire Local Aggregates Assessment and maintaining adequate landbanks, particularly for aggregates; recognising the role of the Joint Plan area in supply of minerals, particularly aggregates, beyond the Joint Plan area boundary, whilst also considering and responding to the ability of the area to sustain minerals extraction without compromising other social, economic and environmental goals including obligations under the Climate Change act.

Optimising the spatial distribution of minerals and waste development

Objective 6	**Identifying suitable locations for the extraction and recycling of minerals, the production of secondary aggregate, key minerals supply and transport infrastructure and the management of waste**
Background explanation supporting the objective.	This includes identifying and allocating appropriate sites or areas for future minerals working, the provision of secondary and recycled aggregate, minerals supply and transport infrastructure and the disposal of mineral waste, as well as identifying and allocating appropriate sites or areas for the management and where necessary disposal of waste. Identification of strategically important sites or areas will be the priority.

Objective 7	**Seeking a good match between locations for waste management infrastructure and the places where waste arises, and between locations for mineral working and minerals supply infrastructure and the places where minerals and mineral products are used, in order to minimise the overall need for transport**
Background explanation supporting the objective.	This includes developing locational policy which encourages new waste management infrastructure in locations as near as practicable to existing sources of arisings and expected patterns of future growth; co-locating waste facilities, where practicable, with complementary industries, businesses and producers or end users of waste including taking opportunities to utilise heat and/or power for the benefit of local communities and businesses, and; encouraging new minerals workings

	and infrastructure, including sites for the supply of secondary and recycled aggregate, in locations well related to existing markets within and near to the Joint Plan area.

Objective 8	**Promoting the use of alternatives to road transport and ensuring that new development is served by suitable transport networks**
Background explanation supporting the objective.	This includes developing locational policy which encourages new waste management infrastructure, minerals workings and minerals supply infrastructure, where practicable for longer distance and large scale movements, to locations where sustainable transport modes such as rail, water and pipeline can be utilised, and; where such modes are not practicable, that locations for development are well connected to suitable highways infrastructure.

Protecting and enhancing the environment, supporting communities and businesses and mitigating and adapting to climate change

Objective 9	**Protecting the natural and historic environment, landscapes and tranquil areas of the Joint Plan area**
Background explanation supporting the objective.	This includes developing policy to protect, conserve and where practicable enhance the environment of the Joint Plan area, including natural and historic assets, landscapes and environments, priority habitats and biodiversity, geodiversity, ground and surface waters, green infrastructure (including agricultural land) and ecosystems services; recognising and protecting the special qualities of the North York Moors National Park and the AONBs, and the historic views into York and supporting the use of local building stone to help maintain and improve the quality of the built environment and local distinctiveness.

Objective 10	**Protecting local communities, businesses and visitors from the impacts of minerals and waste development, including transport**
Background explanation supporting the objective.	This includes promoting high standards of design, operation and where relevant reclamation of minerals and waste sites (including sites for the supply of secondary and recycled aggregate and the disposal of mineral waste) and high standards in the transport of minerals and waste; as well as promoting the involvement of local communities and businesses in proposals for minerals and waste development in order to help protect local amenity, quality of life and the local economy.

Objective 11	**Addressing the causes and effects of climate change relating to minerals and waste development activity, including using opportunities arising from minerals and waste development and reclamation activity to mitigate and adapt to climate change**
Background explanation supporting the objective.	This includes planning for more sustainable design and working practices, including those aimed at carbon reduction, at minerals and waste sites; considering opportunities for the delivery of renewable and low carbon energy; and taking a long term view of the potential for reclaimed minerals sites for purposes such as flood alleviation, the provision of ecosystems services and maintenance of agricultural capacity. This objective would also contribute to meeting the national requirement to reduce greenhouse gas emissions by 80% below 1990 levels by 2050.

Objective 12	**Delivering benefits for biodiversity, recreation opportunities and climate change adaptation through reclamation of minerals workings**
Background explanation supporting the objective.	This objective supports wider objectives within the NPPF and within local strategies which seek to enhance conditions for biodiversity and other important environmental objectives, increase opportunities available for recreation and ensure measures are in place to adapt to climate change. This objective would also support the utilisation of a strategic, landscape scale, approach to reclamation where this could help minimise overall impacts and deliver maximum benefits.

Sustainability Appraisal

To summarise, the objectives of the Plan are considered to have a potentially positive relationship on many of the environmental, economic and community Sustainability Appraisal objectives. The Plan objectives which seek to protect the environment and address climate change (9, 11 and 12) score particularly positively in relation to the SA objectives. A number of uncertainties have been identified, however, in terms of the relationship between Plan and SA objectives, particularly for Plan Objectives 2, 5 and 6. On their own these objectives may ultimately result in a range of potential impacts on the environment and communities in the Plan area, and so exhibit an uncertain relationship with the relevant SA objectives. Plan Objectives 5 and 2 in particular may impact negatively on the achievement of the biodiversity, landscape, the historic environment and community wellbeing SA objectives, with objective 5 showing outright negative effects in these areas.

It should be noted that all objectives will operate in combination with each other and that a positive score has been recorded at least once in relation to each sustainability objective, meaning that the Plan will contribute in some way towards each SA objective.

Q03) Do you agree with the objectives presented above? If not how can they be improved?

Policies map and key diagrams

4.3 The NPPF requires that Local Plans indicate broad locations for strategic development on a key diagram and land use policies on a Policies Map. As part of this consultation draft minerals and waste key diagrams have been prepared, as well as detailed Policies Maps.

4.4 The Policies Map illustrates geographically the policies in the Plan, based on an Ordnance Survey map base. The map includes a range of information such as assets and designations, minerals safeguarding areas and site allocations. The Policies Map is available to view on the Joint Plan website at www.northyorks.gov.uk/mwjointplan .

4.5 The Joint Plan Area covers a large area. To help ensure the Policies Map is user friendly the area has been subdivided into 15 sections (see key map below). A number of separate theme-based maps have also been prepared to help with illustrating some of the large scale constraints, such as flood zones and aerodrome safeguarding zones.

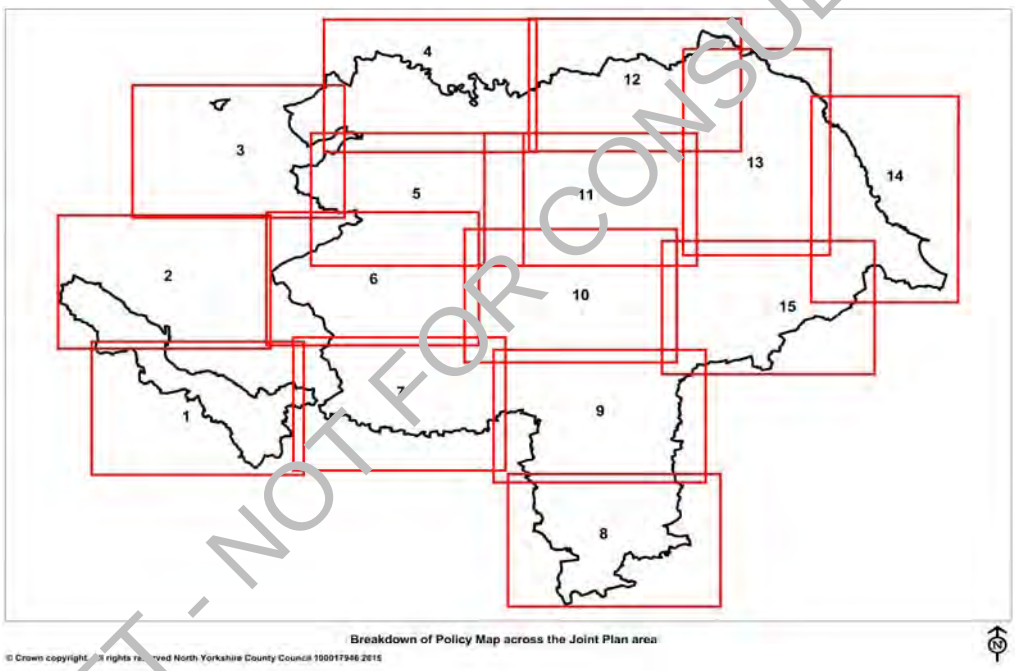


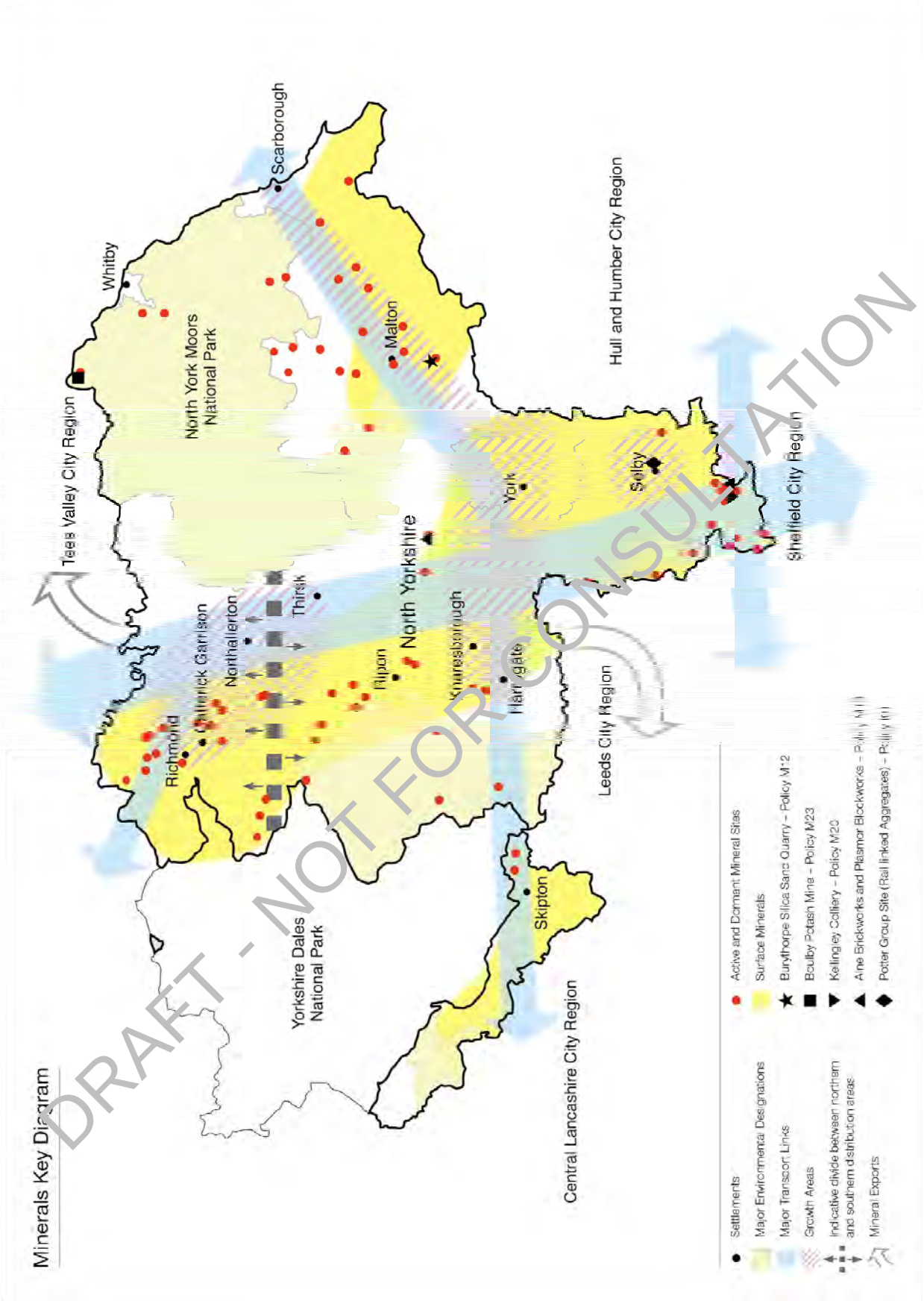
Figure 9: Breakdown of Policies Map across the Joint Plan area

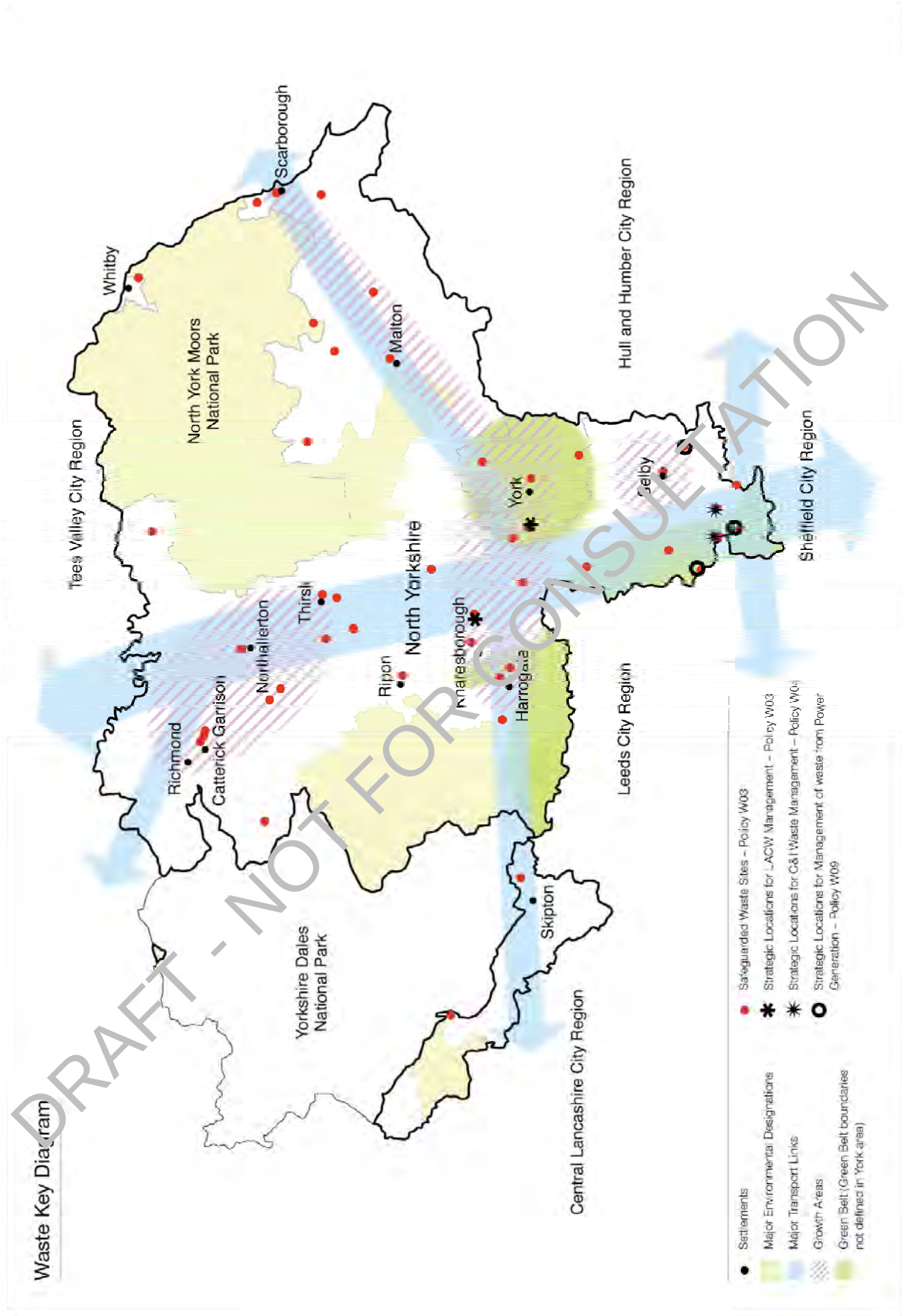
4.6 Both the minerals and waste key diagrams are prepared on a base plan reflecting elements of the York, North Yorkshire and East Riding Spatial Plan and depict the 'focus for growth areas' as identified within the Spatial Plan. It also identifies main towns (with a population in excess of 10,000) and key transport links across the area, as these are of significance for both minerals and waste development.

4.7 The minerals key diagram (below) identifies the general extent of surface minerals resources, as a reflection of the fact that minerals can only be worked where they occur. Many of these resources are also proposed for safeguarding in the Plan. Main areas of important environmental designations, subject of national and local policy restraint for mineral working, are shown. The diagram also shows illustratively the northwards and southwards landbank areas for concreting sand and gravel and identifies a number of key minerals and minerals infrastructure sites of particular significance within the Plan area. Important known export market destinations for

aggregates minerals are indicated to illustrate important cross-boundary supply relationships. Active and dormant mineral working sites are also identified as an indication of where development is currently taking place, or where there is potential for it to take place.

4.8 The waste key diagram (below) identifies important existing waste infrastructure, which is also proposed for safeguarding in the Plan. It also indicates strategic locations of current or permitted large scale infrastructure for management of LACW and C&I waste. Areas of Green Belt are indicated as certain forms of waste management activity are unlikely to be acceptable in such areas. The extent of the inner boundary of the Green Belt for the City of York area is currently under review.





Preferred Options policies

4.9 The following chapters address the identified minerals, waste and associated development management issues and put forward draft policies to deal with them. It is really important that as many people, organisations, and interested parties tell us what they think about the various policies presented within the following chapters.

Q04) Do you support the preferred policies in Chapters 5 to 9? If not how should they be changed and why?

4.10 As there are a substantial number of draft policies in the Plan we have provided reminder questions after each policy. When responding, please use the relevant reference number (provided alongside each draft policy) to ensure your comments are recorded against the correct policy and taken into account when moving the Plan forward to the next stage.

4.11 A number of other questions are asked at specific points of the document. These are clearly identified and we would like to know your views. When responding please use the comments form, available to download at www.northyorks.gov.uk/mwconsult .

Monitoring

4.12 Monitoring the effects of the policies set out in the Plan will be important. This is to help ensure that policies are having their intended effects and to help identify whether any review is required. A monitoring framework has been prepared to accompany the Plan and is provided in Appendix 3.

Q05) Do you agree with the monitoring indicators detailed in the monitoring framework in Appendix 3? If not how can they be improved?

Chapter 5: Minerals

5.1 This Chapter addresses the issues and puts forward draft policies to help maintain continuity of supply for each different mineral resource present in the Joint Plan area. Where practicable it identifies expected future needs for minerals and sets out in broad terms how those needs could be met. It includes key 'spatial' issues where relevant for the various mineral types. In this respect it should be noted that no overall spatial approach applicable to extraction of all forms of mineral worked in the Plan area is proposed, mainly because minerals can only be extracted where they occur in economically viable quantities and this is fundamentally constrained by geology, and also because minerals worked in the Plan area serve very wide geographical markets ranging from local to international. More detailed consideration of the potential impacts of minerals extraction on the environment and communities is provided in Chapter 9 Development Management.

Aggregates supply

5.2 Planning for future supply of aggregate minerals (sand and gravel and crushed rock used mainly by the construction industry) is complex and is the subject of a range of national policy and guidance. There is a more detailed evidence base on sales, reserves and movements of aggregate compared with some other minerals. The following sections address a range of issues relating to the supply of aggregate.

Spatial Approach to Aggregates Supply

5.3 Aggregates are identified in national policy as a mineral of national and local importance and are some of the most important primary minerals worked in the Plan area, as they contribute to requirements for high quality concreting aggregate in urban areas such as West and South Yorkshire and the Tees Valley, as well as meeting local requirements. Minerals resource information produced to support preparation of the Plan indicates that the large majority of potential sand and gravel resources in the Plan area are located within NYCC. The total volume of the resource is very large, although a wide number of constraints such as surface development, environmental constraints and accessibility considerations, means that the volume potentially available for extraction is likely to be substantially lower. Working has traditionally taken place along the main river valleys (including through river dredging historically although this activity has now ceased for environmental reasons) and associated fluvio-glacial landscapes

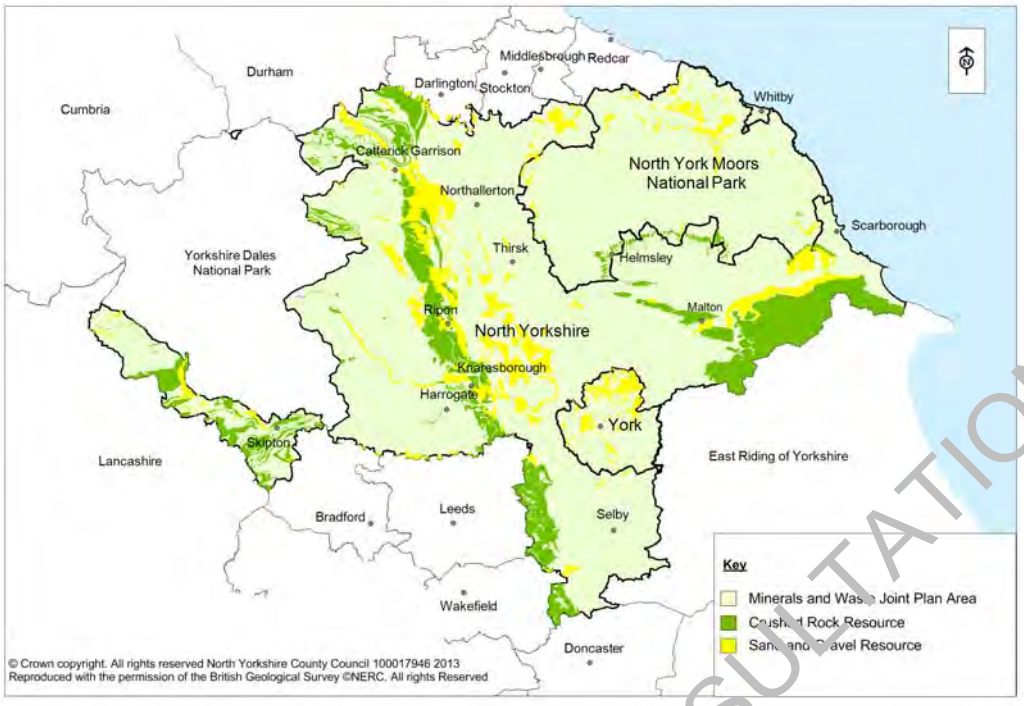


Figure 9: Aggregate resources in Joint Plan area

5.4 Crushed rock resources in the Joint Plan area typically comprise three main types: Carboniferous limestone, which occurs in the north of the Plan area around the Scotch Corner-Leyburn area in Richmondshire and Craven in the West; Magnesian limestone, which occurs as a narrow strip running north-south through the central part of the Plan area; and Jurassic limestone, which occurs around the fringes of the Vale of Pickering and the North York Moors National Park in the east of the area. Small amounts of chalk have also previously been produced but there is currently no significant production. There are no crushed rock resources in the City of York area.

5.5 Substantial resources and permitted reserves of crushed rock exist within Areas of Outstanding Natural Beauty (Howardian Hills and Nidderdale AONBs respectively) and resources also exist in the southern part of the North York Moors National Park. However, as with sand and gravel, national policy encourages the maintenance of crushed rock landbanks from outside National Parks and AONBs, as far as practicable.

Policy M01- Broad geographical approach to supply of aggregates

The Joint Plan area outside the North York Moors National Park, the Areas of Outstanding Natural Beauty and the City of York will be the main focus for extraction of aggregate (sand and gravel and crushed rock). Exceptions to this principle will be made for:

1) **In the National Park and Areas of Outstanding Natural Beauty, the extraction of crushed rock aggregate where it is incidental to building stone extraction as the primary activity, and where the removal of crushed rock from the site will not compromise the high quality reclamation and afteruse of the site.**

2) **In the Areas of Outstanding Natural Beauty, the extension of time for the extraction of remaining permitted reserves at existing quarries and/or, subject where necessary to the major development test, the limited lateral extension or deepening of existing quarries where necessary to help ensure continued**

operation of the site during the plan period. Any proposals in these areas will need to demonstrate a particularly high standard of mitigation of any environmental impacts including, where practical, enhancement of mitigation and quality of site reclamation compared with that required by the existing permission/s. **3) In the City of York area, the small scale extraction of sand and gravel where the development will comply with the development management policies in the Plan.**
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry
Key links to other relevant policies and objectives
M02, M03, M05, M07, M08, M09, M10, M26, I01, I02, S01, S04, S05, D01, D02, D03, D04, D05, D06, D07, D08, D09, D10 | *Objectives 6, 7, 9*
Monitoring: Monitoring indicator 1 (see Appendix 3)

Policy Justification

5.6 Due to a combination of resource availability issues and environmental constraints, it is expected that the NYCC area the main focus for aggregates working over the plan period. However, there may be limited circumstances where it would be appropriate to support aggregates extraction in other parts of the Joint Plan area.

5.7 Although extraction has taken place until relatively recently there are now no existing permitted aggregates quarries in the National Park. Further working would therefore involve opening a new quarry. It is not considered that there is sufficient justification for such development, taking into account the existence of substantial permitted reserves elsewhere in the Joint Plan area, as well as the requirements of national policy, which supports the maintenance of landbanks of aggregate from outside National Parks as far as practical.

5.8 Although Areas of Outstanding Natural Beauty are also subject to a similar degree of national policy constraint, the AONBs in the Joint Plan area contain a number of well-established crushed rock quarries, including Pateley Bridge Quarry in the Nidderdale AONB and a number of smaller quarries in the Howardian Hills AONB. It would not be appropriate to support large scale new working in these areas during the plan period, taking into account availability of reserves and resources of crushed rock elsewhere in the Plan area. However, provision of support for the continuation of working at sites where existing time limited permissions are due to expire during the plan period yet reserves remain, would help ensure that local economic benefits, including local employment, are sustained, as well as the site's contribution to the overall supply of aggregate. Similar benefits could also arise through the limited physical extension of quarrying at existing sites in the AONB where this is needed to enable the site to continue its' existing role in supply.

5.9 Where an extension in time, or additional extraction through lateral extensions or deepening, are proposed a very high degree of protection of the environment should be demonstrated and, preferably, overall enhancement of the quality of environmental mitigation and site reclamation compared with that required by the existing permission/s. This is necessary to help reduce the overall impact of such development on these highly protected areas. It is unlikely that proposals involving an increase in rate of output compared with the previous position would be supported under this policy. Where any proposals are considered to be 'major development' they will also need to satisfy the specific policy tests for such development as currently set out in the National Planning Policy Framework.

5.10 There is no recent history of aggregates extraction in the City of York area but evidence suggests that some sand and gravel resources (mainly building sand) are present, particularly in the north. Resources in this area are subject to a substantial number of environmental and physical constraints and it is considered that the potential to identify suitable resources for development is relatively low. No proposals have come forward from industry in response to calls for sites. However, provision of support in principle for small scale extraction would be appropriate to help encourage delivery of a local contribution to supply, subject to suitable proposals coming forward. The draft York Local Plan identifies a range of criteria which would need to be met by any proposals for working in the City of York area and any proposals would also need to comply with the development management policies in the Minerals and Waste Joint Plan.

Sustainability Appraisal

This preferred option exhibits a range of different effects. In the main the sustainability objectives recorded minor positive effects for the protected landscapes in the plan area. However, some minor negative effects associated with crushed rock extraction shifted location away from protected areas and into the remaining plan area.

Recommendations:
No further mitigation is proposed.

Q04. Ref M01

Do you support the preferred policy approach? If not how should it be changed and why?

Sand and gravel

Scale of provision for sand and gravel over the plan period

5.11 A North Yorkshire sub-regional Local Aggregates Assessment (LAA) has been produced in partnership by North Yorkshire County Council, City of York Council and the North York Moors and Yorkshire Dales National Park Authorities and provides an important source of evidence on supply of, and potential future requirements for, sand and gravel.

5.12 The evidence indicates that demand for sand and gravel worked in the Plan area is likely to continue and may increase over recent historic levels. Pressure for growth and development generates demand for aggregate minerals, including sand and gravel. The Plan area has traditionally been a major supplier of sand and gravel in the Yorkshire and Humber and Tees Valley areas, as well as within North Yorkshire, and growth and development in all these areas is expected to take place over the plan period. Information about relevant future supply and demand factors for sand and gravel has been included in the Local Aggregates Assessment for the North Yorkshire Sub-region, which will be updated regularly. In order to ensure that an adequate supply can be maintained, significant additional resources of sand and gravel will need to be made available for working in the Plan area, in line with the level of demand forecasted in the LAA.

Policy M02: Provision of sand and gravel

Total provision for sand and gravel over the 16 year period 1st January 2015 to 31st December 2030 will be made in the range of 41.3 to 42.8 million tonnes, at an

equivalent annual rate between 2.58 and 2.68 million tonnes. **Additional provision shall be made, through a mid-term review of provision in the Plan, if necessary in order to maintain a 7 year landbank of sand and gravel at 31 December 2030 based on an annual rate of provision to be determined through the review.**
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry
Key links to other relevant policies and objectives
M01, M03, M04, M07, M08, M10, M11, M26, I01, S01, D01 | *Objective 5*
Monitoring: Monitoring indicator 2 (see Appendix 3)

Policy Justification

5.13 The Joint Plan area is particularly important for the supply of high quality concreting aggregate, of which it is significantly the largest supplier in the Yorkshire and Humber area. Supply of concreting sand and gravel into the Tees Valley and adjacent areas in the North East from quarries in northern North Yorkshire is also very important. In 2009 more than half of sales were exported to locations outside North Yorkshire. It is expected that the important role of the area in the supply of aggregate minerals, including to markets outside the Plan area, will need to continue over the period to 2030.

5.14 The initial distribution of provision between concreting sand and gravel (northwards distribution), concreting sand and gravel (southwards distribution) and building sand will be in accordance with the approach set out in Policy M03 Overall Distribution of Sand and Gravel Provision.

5.15 In order to ensure availability of an adequate supply (i.e. a 7 year landbank) at the end of 2030, it will also be necessary to identify the additional resources needed to deliver this. As it is intended that the Local Aggregates Assessment will be updated regularly, and that it may be expected that the demand forecast may change over the plan period in response to new information, it is not considered appropriate to specify, at this stage, the level of further provision that may be needed in order to maintain a 7 year landbank at 2030. This is a matter which can be addressed in monitoring of the Plan and via a mid-term review, at which time the level of additional provision which may be needed can be subject of updated assessment, through the annual review of the Local Aggregates Assessment and additional site allocations brought forward if necessary. A commitment to maintaining a seven year landbank is set out in Policy M04.

Sustainability Appraisal

This preferred policy's effects are in the main uncertain as no indication of where provision would be obtained from is presented. However, clearly extracting a substantial volume of sand and gravel will have at least some environmental effects, though the magnitude of these effects is dependent on location. There are a small number of exceptions to this. For instance, it requires energy to extract and to transport minerals which, assuming continued reliance on fossil energy, would generate significant CO2 and other greenhouse gases, with strongly works against the climate change objective. Similarly, the 'minimising resource use' use objective displays strong negative effects, as this policy will allow for the consumption of up to 42.8 Mt of primary minerals. There are also some positive effects noted, for instance the recreation objective receives indirect positive support, as further extraction would ultimately lead to further restoration in line with other policies in the plan, while the economic

development, flooding and changing population objectives would also be supported.

Recommendations:
While much is uncertain in relation to this objective, although this is inevitable in a policy of this nature. To some extent this policy is mitigated by policy M11 which encourages alternatives to land won primary aggregate, though it is acknowledged that many secondary and recycled aggregates are not direct substitutes for sand and gravel. Further consideration of the potential contribution made by recycled and secondary aggregate is recommended when this policy is considered at the mid-term review, depending on the availability of reliable data.

Q04. Ref M02

Do you support the preferred policy approach? If not how should it be changed and why?

Overall distribution of sand and gravel provision

5.16 The Local Aggregates Assessment provides further information on the operation of the sand and gravel supply system in North Yorkshire and is a key source of evidence for the Plan.

5.17 Due to the specific properties and different end uses of building sand and concreting sand and gravel, their supply has been addressed separately. There is no general substitute for building sand and concreting sand and gravel and it is considered that maintaining this distinction is likely to remain appropriate over the plan period.

Policy M03: Overall distribution of sand and gravel provision	
Overall provision of sand and gravel will be allocated in the following proportions: **Southwards distribution area: 50%** **Northwards distribution area: 45%** **Building sand: 5%** **If it is not practicable to make overall provision, through grant of permission on allocated sites in accordance with this ratio, then provision for concreting sand and gravel shall be made across both areas in combination.**	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
M01, M02, M04, M07, M08, M26, I01, I02, S01, S04, S05, D01	*Objectives 5, 6, 7*
Monitoring: Monitoring indicator 3 (see Appendix 3)	

Policy Justification

5.18 Evidence in the Local Aggregates Assessment suggests that demand for sand and gravel from the Plan area will be significant and that there will be a continuing requirement for exports of concreting sand and gravel into adjacent areas, particularly Tees Valley and West and South Yorkshire, where there are substantial limitations on the availability of similar resources. Since adoption of the North Yorkshire Minerals Plan in 1997 separate provision has been made for maintenance of supply in northwards and southwards distribution areas for concreting sand and gravel, reflecting the distribution of key markets for sand and gravel as well as the distribution of sources of supply and this approach has been successful in

maintaining supply. In determining which area a proposed site or reserve falls, regard will be had to its geographical location and the likely markets for the mineral.

5.19 Although there are some indications that there could be a small relative increase in future demand from markets to the South in response to future supply constraints and growth pressures, an allowance for this has been made in the overall forecast of demand for the Joint Plan area and there are a number of uncertainties about the actual scale of future demand for concreting sand and gravel in the various markets served by the Joint Plan area. It is therefore considered that provision should be made in accordance with the recent historic shares of total provision for each distribution area, with separate provision for building sand reflecting the different end uses for this product.

Sustainability Appraisal

There are a range of effects that arise from this preferred policy and all effects are tentative with significant uncertainty at this scale. For instance, the biodiversity, water, soils, historic environment and recreation objectives all show a negative relationship with this preferred policy, largely because the balance of development proposed favours areas that are richer in terms of the environmental assets associated with those SA objectives.

More positive contributions towards objectives are reported for the traffic, air quality and climate change objectives because, as the policy seeks to fit with the distribution of markets and demand, the length of minerals freight journeys will be slightly less on balance. This will also keep costs down and benefit the economy SA objective. Other objectives are either neutral or report more mixed effects. For instance, while journeys may be shorter, because the southern plan area is closer to centres of population, there may be a greater probability that traffic will affect communities.

Recommendations:
No further mitigation is proposed

Q04. Ref M03

Do you support the preferred policy approach? If not how should it be changed and why?

Landbanks for sand and gravel

5.20 Landbanks are an important aspect of government policy to help ensure continuity of supply of minerals to help support economic growth and provision of infrastructure. The NPPF requires mineral planning authorities to make provision for landbanks for sand and gravel of at least 7 years supply (i.e. sufficient reserves with planning permission to last a 7 year period at the anticipated annual rate of extraction identified in the Local Plan).

Policy M04: Landbanks for sand and gravel

A minimum 7 year landbank of concreting sand and gravel will be maintained throughout the plan period for each of the northwards and southwards distribution areas identified on the key diagram.

A separate minimum 7 year landbank will be maintained throughout the plan period for building sand.

Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
M01, M02, M03, M07, M08, M10, M26, I01, S01, D01	*Objective 5*
Monitoring: Monitoring indicator 4 (see Appendix 3)	

Policy Justification

5.21 The landbank is a key means of monitoring adequacy of supply, with a shortfall in the landbank indicating that more reserves need to be released. For sand and gravel a minimum landbank sufficient for 7 years at the anticipated rate of supply (at the manual rate as set out in the Plan) is required. The spatial approach for sand and gravel is to make provision for supply of concreting sand and gravel from separate northwards and southwards distribution areas, along with a separate landbank for building sand, which serves different end uses. To assist with monitoring the effectiveness of this approach it will be necessary to monitor, and maintain, separate landbanks for the southwards and northwards distribution areas and for building sand.

5.22 As concreting sand and gravel resources are only present in potentially workable configurations in the NYCC area and City of York Council areas it follows that, subject to other policies in the Plan, the provision needed to maintain sand and gravel landbank requirements will be met within those parts of the Plan area outside the North York Moors National Park. National planning policy confirms that National Park Authorities are not required to maintain landbanks owing to other policy constraints.

5.23 Taking account of the distribution of sand and gravel resources within the Joint Plan area and the existence of a significant number of individual production sites and operator companies, it is not considered there is likely to be a case for setting a minimum sand and gravel landbank period of more than 7 years.

Sustainability Appraisal

Impacts in relation to this policy are largely neutral in the short term with minor negative impacts occurring in the medium to long term. This is because in the longer term separate northwards and southwards distribution area landbanks could mean that there is increased pressure to maintain the landbank in defined (and therefore finite) areas, which may put additional pressure to approve sites in areas where cumulative effects on are already starting to build. Major negative impacts have been recorded in relation to minimising resource use and prioritising management of waste as high up the waste hierarchy as practicable as maintaining a landbank is likely to reduce incentive to work towards these objectives. Positive impacts have been identified in relation to the economy and meeting the needs of a changing population as this policy would ensure that adequate resources are available to support growth.

Recommendations:
No further mitigation is proposed.

Q04. Ref M04

Do you support the preferred policy approach? If not how should it be changed and why?

Crushed Rock

Scale of provision of crushed rock over the plan period

5.24 The Joint Plan area is a major producer of crushed rock in the Yorkshire and Humber Region and a significant exporter to other areas, including West and South Yorkshire and the East Riding and to areas within the North East Region.

5.25 National planning policy requires planning authorities to consider and plan for a steady and adequate supply of aggregate for their area, taking account of any significant cross boundary movements, by preparing an annual Local Aggregate Assessment (LAA). A North Yorkshire sub-regional LAA has been produced in partnership with North Yorkshire County Council, City of York Council and the North York Moors and Yorkshire Dales National Park Authorities.

Policy M05: Provision of crushed rock	
Total provision for crushed rock over the 16 year period 1st January 2015 to 31st December 2030 shall be 60 million tonnes, at an equivalent annual rate of 3.75 million tonnes, within which specific provision for a total of 22.2 million tonnes at an equivalent annual rate of 1.39 million tonnes per annum shall be for Magnesian Limestone. **Additional provision shall be made, through a mid-term review of provision in the Plan, if necessary in order to maintain a 10 year landbank of crushed rock, including a separate 10 year landbank for Magnesian Limestone, at 31 December 2030 based on an annual rate of provision to be determined through the review.**	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
M01, M06, M09, M10, M11, M26, I01, S01, D01	*Objective 5*
Monitoring: Monitoring indicator 5 (see Appendix 3)	

Policy Justification

5.26 Evidence indicates that demand for crushed rock worked in the Plan area is likely to continue, although the precise scale of future requirements is difficult to assess. Pressure for growth and development generates demand for aggregate minerals, including crushed rock. The Plan area has traditionally been an important supplier of crushed rock in the Yorkshire and Humber and Tees Valley areas, as well as within North Yorkshire, and growth and development in all these areas is expected to take place over the plan period. Information about relevant future supply and demand factors for crushed rock has been included in the Local Aggregates Assessment for the North Yorkshire Sub-region, which will be updated regularly.

5.27 Substantial permitted reserves of crushed rock already exist in the Plan area and there is no near term prospect of an overall shortfall in supply. However, evidence in the LAA suggests that in order to reflect supply imbalances across the range of crushed rock types present in the area, it would be beneficial to make available further resources of Magnesian Limestone. This would help ensure that an adequate supply of this particular rock type can be maintained, as well as helping to maintain local sources of aggregates supply in the southern part of the Plan area. It is therefore appropriate to identify specific provision for this type of rock separately from other crushed rock sources.

5.28 In order to ensure availability of an adequate supply (i.e. a 10 year landbank) at the end of 2030, it may also be necessary to identify some additional resources of crushed rock towards the end of the Plan period, depending on the actual scale of demand that occurs. As it is intended that the Local Aggregates Assessment will be updated regularly, and that it may be expected that changes to the demand forecast may occur over the plan period, it is not considered appropriate to specify, at this stage, the level of further provision that may be needed in order to maintain a 10 year landbank at 2030. This is a matter which can be addressed in monitoring of the plan and via a mid-term review, at which time the level of additional provision which may be needed can be subject of updated assessment, and additional provision made if necessary. A commitment to maintaining a 10 year landbank of crushed rock throughout the plan period is set out in the following policy.

Sustainability Appraisal

This preferred policy's effects are in the main uncertain as no indication of where provision would be obtained from is presented. However, clearly extracting a substantial volume of crushed rock will have at least some environmental effects, though the magnitude of these effects is dependent on location. There are a small number of exceptions to this. For instance, it requires energy to extract and to transport minerals which, assuming continued reliance on fossil energy, would generate significant CO2 and other greenhouse gases, which strongly works against the climate change objective. Similarly, the 'minimising resource use' use objective displays strong negative effects as this policy will allow for the consumption of up to 60 Mt of primary minerals. There are also some positive effects noted, for instance the recreation objective receives indirect positive support, as further extraction would ultimately lead to further restoration in line with other policies in the plan, while the economic development, flooding and changing population objectives would also be supported.

Recommendations:
While much is uncertain in relation to this objective, this is inevitable in a policy of this nature. No further mitigation is proposed.

Q04. Ref M05

Do you support the preferred policy approach? If not how should it be changed and why?

Landbanks for Crushed Rock

5.29 National planning policy for aggregate minerals requires the maintenance of landbanks (a stock of reserves with planning permission for extraction) to help ensure continuity in supply. The landbank is a key means of monitoring adequacy of supply, with a shortfall in the landbank indicating that more reserves need to be released.

Policy M06: Landbanks for crushed rock

A minimum overall landbank of 10 years will be maintained for crushed rock throughout the plan period. A separate 10 year landbank will be monitored and provided for Magnesian Limestone crushed rock.

Where new reserves of crushed rock are required in order to maintain the overall landbank above the 10 year minimum period these will be sourced from outside the National Park and Areas of Outstanding Natural Beauty.

Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
M01, M05, M09, M26, I01, S01, D01	*Objective 5*
Monitoring: Monitoring indicator 6 (see Appendix 3)	

Policy Justification

5.30 National Planning Policy requires a minimum landbank of crushed rock sufficient for a minimum of 10 years at the anticipated rate of supply (at the annual rate as set out in the Plan) is required. The approach for crushed rock is to identify an overall landbank for crushed rock, along with a separate landbank for Magnesian Limestone, which mainly serves different end uses and which is currently more constrained in supply than Carboniferous Limestone (the other main source of crushed rock in the plan area). This will assist with monitoring availability of supply across the main rock types worked in the area.

5.31 Crushed rock resources occur within highly protected parts of the plan area, including the National Park and in both the Howardian Hills and Nidderdale AONBs. There are no current crushed rock workings in the National Park and release of crushed rock in the Park where necessary in order to maintain the landbank would not be justified by national policy. Both AONBs currently contribute to the supply of crushed rock and therefore the overall landbank of reserves. The minerals supply policies in the Plan support the limited working of additional resources at these sites. However, such support is provided in order to maintain the benefits that these established sites bring to the local employment and economy rather than the contribution they may make to the landbank. It therefore follows that the release of additional reserves in the AONBs specifically in order to maintain the landbank over the 10 year minimum period will not be supported under this policy.

Sustainability Appraisal

This policy could have negative effects on the environment, including biodiversity / geodiversity, air and water quality, landscape, resource use, minimising waste and the historic environment, and communities of the Plan area should these result in the need to release more land for extraction than is currently permitted. The policy would however, enable a level of minerals supply to meet demand for development and therefore would result in major positive impacts in relation to the economy and meeting the needs of a changing population. By requiring new reserves of crushed rock to be sourced from outside the National Park and AONBs, this policy would result in some positive effects for these designated areas particularly relating to landscape, recreation and tourism, cultural heritage and amenity. Some negative impacts may occur in these designated landscapes as there would be a decrease in local job opportunities.

Recommendations:
No further mitigation is proposed.

Q04. Ref M06

Do you support the preferred policy approach? If not how should it be changed and why?

Maintenance of primary aggregates supply

5.32 National planning guidance encourages future requirements for aggregate to be provided through the identification and allocation, where practicable, of specific sites for development. Such an approach has the benefit of providing greatest certainty to industry and other interested parties on locations where future development will be acceptable in principle, thus helping to encourage investment as well as providing more clarity to local communities.

5.33 The assessment of future requirements for aggregate, carried out during preparation of the Plan, has indicated that provision for further working needs to be made in order to help ensure continuity of supply of some types of aggregate, particularly concreting sand and gravel, building sand and Magnesian Limestone.

Policy M07: Meeting concreting sand and gravel requirements

Requirements for concreting sand and gravel will be met through existing permissions and the grant of permission on sites allocated in the Plan for working.

Part 1 Sand and gravel (northwards distribution) allocations:

i. Allocations required in order to meet requirements during the plan period:

Land at Killerby (MJP21)
Land at Home Farm, Kirkby Fleetham (MJP33)

ii. Allocations potentially required to contribute to maintenance of an adequate landbank at 2030. Permission will not be granted for development of these allocations prior to 2025, unless there is a shortfall in the sand and gravel landbank in the northwards distribution area:

Land South of Catterick (MJP17)
Land West of Scruton (MJP43)

Part 2 Sand and gravel (southwards distribution) allocations:

i. Allocations required in order to meet requirements during the plan period:

Land at Langwith Hall Farm (MJP06)
Land at Oaklands (MJP07)
Land at Pennycrofts and Thorneyfields and Manor Farm, Ripon (MJP14)
Land at Great Givendale, Ripon (MJP51)

ii. Allocations potentially required to contribute to maintenance of an adequate landbank at 2030. Permission will not be granted for development of these allocations prior to 2025, unless there is a shortfall in the sand and gravel landbank in the southwards distribution area:

Land at Aram Grange, Asenby (MJP04)
Land at Ruddings Farm, Walshford (MJP35)

Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and District and Borough Councils	
Key links to other relevant policies and objectives	
M02, M03, M04, S01	*Objectives 5, 6*
Monitoring: Monitoring indicator 7 (see Appendix 3)	

Policy Justification

5.34 Evidence indicates that, taking into account the level of permitted reserves at the end of 2014, additional provision of the order of 12.7 million tonnes (mt) are required for the sand and gravel northwards distribution area over the period to 2030. The equivalent figure for the southwards distribution area is 6.7mt. Additional reserves would be needed in order to help maintain an adequate landbank beyond the end of the plan period.

5.35 A range of specific locations have been put forward by industry for consideration during preparation of the Plan and these have been assessed. Requirements for concreting sand and gravel can be met through the release of reserves on specific sites to be allocated in the Plan. Some sites proposed to be allocated are expected to be required in order to meet needs during the period to 2030. Proposed allocations to meet this requirement in the northern distribution area contain an indicative 15mt of reserves. Proposed allocations in the southwards distribution area contain an indicative 8mt. Other sites are identified in the Policy in order to help demonstrate how a contribution to longer term (post 2030) landbank requirements could be made, and to provide an element of flexibility in overall provision. These sites could provide an estimated further 5-6mt and 4mt for the northwards and southwards distribution areas respectively. In order to help ensure a planned approach to provision, it would not be appropriate to release reserves in sites intended to provide for longer term needs until the latter part of the plan period, unless a shortfall in the landbank indicates that additional reserves are required.

5.36 Additional provision, if required in order to meet longer term concreting sand and gravel landbank requirements, will be addressed through a mid-term review of the Plan in line with Policy M02.

5.37 Planning permission will be granted for development of sites allocated in the Plan subject to compliance with other relevant policies.

Sustainability Appraisal

A wide range of impacts will result from extraction of sand and gravel at the sites specified in this policy. These are outlined in the Site Sustainability Appraisal Report. As many of the site allocations lie in close proximity to other existing or allocated sites, cumulative impacts will be of particular importance.

Recommendations:
Appropriate mitigation should be incorporated at each allocation site in line with recommendations in the Site Sustainability Appraisal findings for each site and with other policies in the Plan. Cumulative impacts should be given particular regard through the planning application process.

Q04. Ref M07

Do you support the preferred policy approach? If not how should it be changed and why?

Building Sand

Policy M08: Meeting building sand requirements	
Requirements for building sand will be met through existing permissions and the grant of permission on sites allocated in the Plan for working. **Building sand allocations:** **Land at Hensall Quarry (MJP22)** **Land at West Heslerton Quarry (MJP30)** **Land adjacent to Plasmor blockworks, Great Heck (MJP44)** **Land at Mill Balk Quarry, Great Heck (MJP54)**	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
M02, M03, M04, S01	*Objectives 5, 6*
Monitoring: Monitoring indicator 8 (see Appendix 3)	

Policy Justification

5.38 Evidence suggests that the scale of additional provision for building sand needed to meet requirements over the plan period is relatively small (amounting to around 1.3 million tonnes (mt) over the period to 2030). Although there is only very limited evidence available on the distribution of potentially suitable building sand resources, a range of specific locations have been put forward by industry for consideration during preparation of the Plan and these have been assessed. Requirements for building sand during the plan period can be met through the release of reserves on specific sites put forward for consideration, which contain an estimated 1.8mt of reserves .and therefore would also help contribute towards maintaining an adequate landbank of building sand beyond 2030.

5.39 Planning permission will be granted for development of sites allocated in the Plan subject to compliance with other relevant policies.

Sustainability Appraisal

A wide range of impacts will result from extraction of sand at the sites specified in this policy. These are outlined in the Site Sustainability Appraisal Report. As many of the site allocations lie in close proximity to other existing or allocated sites, cumulative impacts will be of particular importance.

Recommendations:
Appropriate mitigation should be incorporated at each allocation site in line with recommendations in the Site Sustainability Appraisal findings for each site and with other policies in the Plan. Cumulative impacts should be given particular regard through the planning application process.

Q04. Ref M08

Do you support the preferred policy approach? If not how should it be changed and why?

Crushed rock

Policy M09: Meeting crushed rock requirements
Requirements for Magnesian Limestone over the plan period will be met through existing permissions and the grant of permission on sites allocated in the Plan for working. **Magnesian Limestone allocations:** **1) Allocations required in order to meet requirements during the plan period:** **Land at Jackdaw Crag South, Stutton (MJP23)** **Land at Barnsdale Bar Quarry (MJP28)** **Land at Went Edge Quarry, Kirk Smeaton (MJP29)** **2) Allocations potentially required to contribute to maintaining an adequate landbank at 2030:** **Land at Gebdykes Quarry (MJP11)** **Maintenance of supply of crushed rock is also supported through the identification of allocated sites at:** **Land at Scarborough Field, Forcett (MJP03) (Carboniferous Limestone)** **Land at Settrington Quarry (MJP08) (Jurassic Limestone)** **Land at Whitewall Quarry (MJP12) (Jurassic Limestone)** **Land at Darrington Quarry (MJP24) (retention of processing plant site and haul road)**
Key links to other relevant policies and objectives
M05, M06, S01 | *Objectives 5, 6*
Monitoring: Monitoring indicator 9 (see Appendix 3)

Policy Justification

5.40 Evidence indicates that a further 5.2 million tonnes (mt) of reserves of Magnesian Limestone are needed in order to meet requirements over the period to 2030.

5.41 A range of specific locations have been put forward by industry for consideration during preparation of the Plan and these have been assessed. Requirements for Magnesian Limestone during the plan period can be met through the release of reserves on specific sites put forward for consideration, which contain an estimated 3.5mt and therefore would also help contribute towards maintaining an adequate landbank of Magnesian Limestone beyond 2030. Further resources (2mt) suitable for allocation are also identified at Gebdykes Quarry although these are not expected to play a role in contributing to supply until the latter part of the plan period at the earliest.

5.42 Supply of Magnesian Limestone in the Plan area and adjacent areas is also facilitated by the presence of existing processing plant and related infrastructure within the former Darrington Quarry site, near Cridling Stubbs. Although mineral extraction at Darrington Quarry in North Yorkshire ceased a number of years ago, permission has been granted to retain the processing plant to serve more recently permitted Magnesian Limestone extraction within Wakefield, to which the plant site is linked by a private haul road. An application to retain the plant site and haul road for a further period in order to serve the remaining expected quarry working life in

Wakefield is currently awaiting determination. Both permitted reserves an annual output at the site are substantial and make an important contribution to overall supply of Magnesian Limestone. A proposed site allocation for retention of the processing plant site and related infrastructure has been submitted and is considered suitable for allocation.

5.43 Although not specifically required in order to meet the identified shortfall in supply of Magnesian limestone, sites for working other crushed rock resources (Carboniferous Limestone and Jurassic Limestone) have been put forward for consideration during preparation of the Plan. Such resources could help contribute to the overall supply of crushed rock, help provide flexibility in supply and ensure continuity of production at existing sites, together with their associated economic and other benefits. Following site assessment, sites containing approximately 3mt of Carboniferous Limestone and 5.3mt of Jurassic Limestone are therefore also considered suitable for allocation in the Plan.

5.44 Planning permission will be granted for development of sites allocated in the Plan subject to compliance with other relevant policies.

Sustainability Appraisal

A wide range of impacts will result from extraction of crushed rock at the sites specified in this policy. These are outlined in the Site Sustainability Appraisal Report. As many of the site allocations lie in close proximity to other existing or allocated sites, cumulative impacts will be of particular importance.

Recommendations:
Appropriate mitigation should be incorporated at each allocation site in line with recommendations in the Site Sustainability Appraisal findings for each site and with other policies in the Plan. Cumulative impacts should be given particular regard through the planning application process.

Q04. Ref M09

Do you support the preferred policy approach? If not how should it be changed and why?

Extensions to existing quarries on unallocated sites

5.45 The policy approach in the North Yorkshire Minerals Local Plan (1997) has been to support the principle of small scale extensions to aggregate quarries on sites not allocated in the Plan, subject to a number of criteria being met, which generally seek to ensure that the scale and duration of extended working remain in context with the existing site. Any reserves coming forward in such sites have been treated as 'windfalls' adding to the overall landbank of the relevant mineral.

5.46 It is recognised that proposals for extensions to existing aggregate quarries are likely to continue to come forward as planning applications during the life of the new Joint Plan and that, in some cases, such applications may not be on land allocated specifically in the Plan as being suitable in principle for further working. It is possible that proposals will also come forward for extensions to other types of mineral workings. Such applications are most likely to come forward in order to maintain continuity of production at an established site where current permitted reserves are

near to exhaustion but further suitable resources have been identified on immediately adjacent land.

Policy M10: Unallocated extensions to existing quarries	
Proposals for extensions to minerals extraction sites on land not allocated for working in the Plan will be supported subject to the following criteria; **i) Where necessary in the National Park and AONBs, a satisfactory outcome in respect of the requirements for major development as set out in Policy D04;** **ii) Where the development would not compromise overall delivery of the strategy for the sustainable supply and use of minerals, including encouragement of the use of alternatives to primary minerals;** **iii) Where the development would be consistent with the development management policies in the Plan.**	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
M02, M03, M05, M11, D01, D04	*Objective 5*
Monitoring: Monitoring indicator 10 (see Appendix 3)	

Policy Justification

5.47 The presumption in favour of sustainable development means that development should not be prevented solely because it is not identified and supported specifically in the Plan. Such an approach could unnecessarily prevent development which might otherwise be acceptable and could impact adversely on the local and wider economy and other social objectives. However, it will be particularly important to ensure that, where development proposals do come forward on land not identified specifically for working, that they do not compromise other important strategic objectives of the Plan and that environmental and amenity considerations are given careful consideration through application of relevant development management policies in the Plan. In all cases any reserves granted on unallocated sites would, where relevant, contribute towards the landbank of the mineral.

5.48 The NPPF does not preclude major development from taking place in protected areas however proposals need to be considered against the requirements for major development which say that exceptional circumstances need to be shown and it can be demonstrated that they are in the public interest. Although the term 'major development' is not defined in the context of the national policy test, it is likely that most proposals for extensions to aggregates quarries in the National Park and AONBs will be subject to the test.

Sustainability Appraisal

For most SA objectives this preferred policy results in mixed positive and negative effects when compared to the SA objective. This is because the option allows unallocated extensions to sites, which would ordinarily result in a range of negative environmental and social effects (largely because it will either extend or increase issues that affected areas surrounding quarries during the lifetime of the quarry). However, the preferred policy does include a number of safeguards against this that should lessen effects and make sites more sustainable, not least the major development test and the reference to consistency with development control policies. The policy would also offset the need for some new sites to be developed.

Some objectives vary from this pattern slightly. For instance, for climate change the extended negative traffic impacts at sites are seen as outweighing the benefits of making

use of existing infrastructure at site (though there is considerable uncertainty here), while the soils objective notes the loss of land / soils that is potentially allowed by this policy. Similarly, although this option might reduce the need for new sites elsewhere to some degree, there will be jobs and revenue / viability benefits from allowing site extensions, as well as benefits to tourism that will result from the protections afforded to protected landscapes in the policy. This leads to strongly positive effects on the economy objective. Other objectives where positives outweigh the negative, or are positive in their own right are the landscape and changing population needs objectives.

Recommendations:
This policy is largely already mitigated for by the development management Policies. No further mitigation is proposed.

Q04. Ref M10

Do you support the preferred policy approach? If not how should it be changed and why?

Secondary and Recycled Aggregates

5.49 National policy in the NPPF requires mineral planning authorities, so far as practicable, to take account of the contribution that secondary and recycled material and minerals waste would make to supply of aggregate, before considering extraction of primary materials. Secondary aggregates are by products of other processes which can be used to substitute for primary aggregate minerals such as sand and gravel and crushed rock. Typical examples which occur in the Joint Plan area include colliery spoil and power station ash, comprising furnace bottom ash (FBA) and pulverised fuel ash (PFA). Recycled aggregates, arising from construction, demolition and excavation activities, can also be used to substitute for primary minerals, often as low quality aggregate for construction uses such as bulk fill.

5.50 The southern part of the Joint Plan area contains two of the three major power stations within the Yorkshire and Humber region (Drax and Eggborough) with a third (Ferrybridge) located just outside the boundary of the area and utilising ash disposal facilities located within it[12]. Colliery spoil is produced at Kellingley Colliery, which is also located in Selby District, although the Colliery is now expected to close at the end of 2015.

5.51 National planning policy requires planning authorities to consider and plan for a steady and adequate supply of aggregate for their area, taking account of any significant cross boundary movements, by preparing an annual Local Aggregate Assessment (LAA). A North Yorkshire sub-regional LAA has been published which concludes that, in terms of secondary and recycled aggregates, it would be reasonable to assume capability to maintain supply at levels similar to those prevailing over recent years, although there may be potential for a small increase in utilisation of some secondary and recycled materials.

5.52 There has been growing interest recently in the potential for an increased supply of sand and gravel from marine sources to replace an element of land won supply, particularly into markets in the major urban areas in West and South Yorkshire, and this is supported in principle in national policy. A study undertaken jointly on behalf of mineral planning authorities in Yorkshire and Humber was published in 2014 (see

[12] It was announced in May 2015 that Ferrybridge C Power Station is expected to close in March 2016.

paragraph 2.50). This indicates potential in the medium to longer term for a significant increase in supply into such market areas (with the potential therefore to offset an element of supply of land won sand and gravel from North Yorkshire). However, at this stage it is not considered appropriate to assume that such sources will have a substantial impact on supply during the timeframe of the current Plan. This is an issue which will need to be kept under review and addressed where necessary in future updates of the Local Aggregates Assessment and in review of the Plan where necessary, including as referred to in Policy M02.

Policy M11: Supply of alternatives to land won primary aggregates	
Proposals which would facilitate the use of secondary and recycled aggregate as an alternative to primary aggregate will be supported including: **1) The development of appropriately scaled new ancillary infrastructure including ancillary manufacturing facilities, utilising secondary aggregate as the primary raw material, at sites where secondary aggregates are produced;** **2) The supply of secondary aggregate from waste disposal sites provided it would not involve disturbance to restored ground or landscaped features;** **3) The separation of materials with potential for use as aggregate during waste management activity and the maximum recovery of recycled aggregate during demolition activity;** **4) The use of appropriately located aggregates mineral extraction sites as locations for the ancillary reception, processing and onward sale of recycled aggregate during the associated period of minerals extraction at the site;** **5) The use of appropriately located sites for the transport of minerals as locations for the ancillary reception, processing and onward sale of recycled aggregate during the associated period of minerals transport activity at the site.** **Proposals will need to demonstrate consistency with relevant development management policies in the Plan.**	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
M02, M05, M22, W05, W06, I02, S05, D03, D05, D07, D09	*Objectives 4, 6*
Monitoring: Monitoring indicator 11 (see Appendix 3)	

Policy Justification

5.53 A range of measures, capable of being implemented or supported through planning processes, can help contribute to objectives to increase the use of secondary and recycled aggregates and are supported in the Plan. Support for facilities for the management of construction and demolition waste is also provided under the waste-specific policies and can also help with supply of materials which can substitute for primary aggregate.

5.54 Although use of secondary and recycled aggregate gives rise to benefits in terms of replacement of natural materials and in generating economic activity in its own right, it can also have impacts on the environment and amenity. Proposals for new facilities and infrastructure for the supply of secondary and recycled aggregate will therefore need to comply with other relevant policies in the Plan, particularly the development management policies in Chapter 9.

5.55 A particular consideration is the role that quarries and sites for the transport of minerals can play in providing locations for the reception, processing and supply of aggregate. Many aggregates quarries now supply a wide range of products, including a proportion of recycled materials, sometimes as a blend of primary and recycled materials. This can help minimise overall use of primary aggregate and help sustain economic activity at minerals extraction sites. However, aggregates quarries are generally located in open countryside locations and are sometimes subject to a range of environmental constraints in the vicinity. In some cases they are located in the Green Belt and may have been permitted because of the particular circumstances which allow flexibility for minerals extraction in the Green Belt, subject to particular tests. It is considered that small scale recycling activity at operational minerals extraction sites in the Green Belt can be supported in principle under this policy, provided that it would preserve the openness of the Green Belt. Construction of buildings for the purposes of recycling activity at quarries in the Green Belt would be unlikely to be supported under this policy.

5.56 In all cases quarries and sites for the transport of minerals proposed to be used for the reception and supply of recycled aggregate as part of an overall mix of supply should be well located in relation to transport networks including the major road network, in line with Policy D03 in order to help minimise any adverse impacts on environment or amenity.

Sustainability Appraisal

For most of the SA objectives positive effects arise because supporting the use of secondary and recycled aggregates would offset the need to extract primary aggregates (and the negative effects associated with this). Some SA objectives report neutral effects as impacts associated with extraction elsewhere are simply shifted to new locations. However, the health and wellbeing and community vitality objectives note some additional negative effects associated with the dusty nature of some secondary aggregates, while the water objective recognises the potential for water pollution from the storage and processing of some secondary aggregates (which would be dealt with via the environmental permitting regime). There are also uncertainties associated with the supply of secondary aggregates such as colliery spoil (particularly if sources of colliery spoil supply close down).

Recommendations:
This policy is largely mitigated by other policies in the plan (particularly D02 Local Amenity and Cumulative Impacts) as well as the environmental permitting / pollution control regime. However, monitoring of the supply of secondary and recycled aggregates is recommended due to uncertainties over supply.

QUX. Ref M11

Do you support the preferred policy approach? If not how should it be changed and why?

Silica Sand

5.57 Silica sand is a scarce industrial mineral which can, depending on its particular properties, serve a variety of end uses in manufacturing and industry. The overall geographical extent of potential resources of silica sand within the Plan area is very small, with occurrences in two separate locations: at Burythorpe, near Malton to the east and Blubberhouses, in Harrogate Borough to the west. There are no resources of silica sand in the City of York area or the North York Moors National Park.

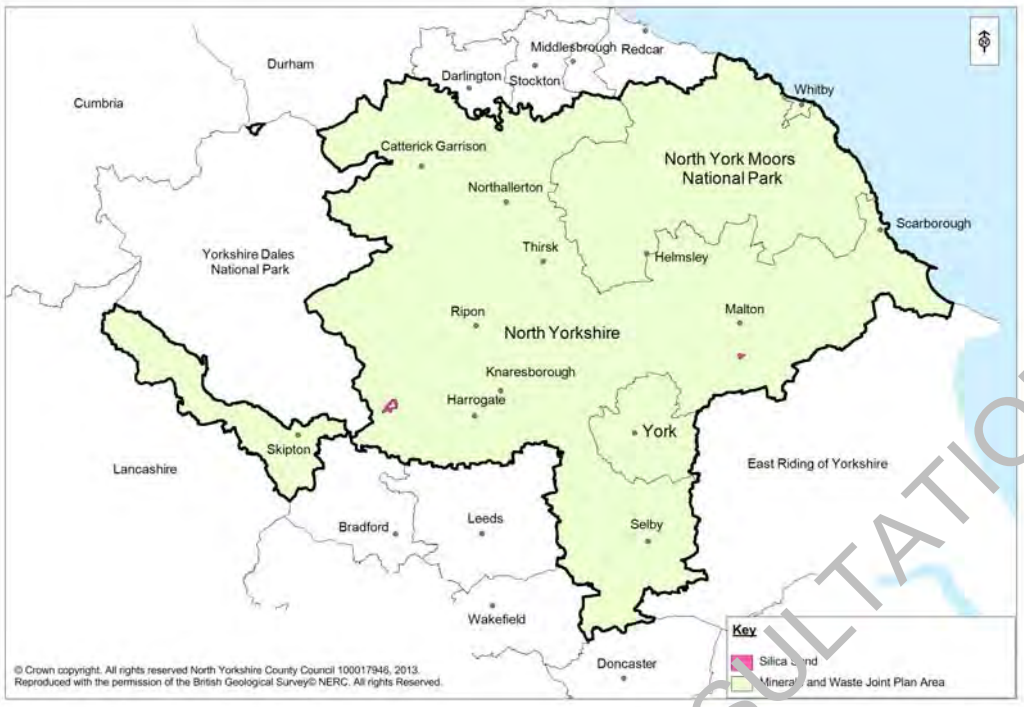


Figure 10: Silica sand resources in Joint Plan area

5.58 Due to its scarcity silica sand is a resource of national significance. MPAs are required to plan for a steady and adequate supply of industrial minerals by co-operating with neighbouring and more distant authorities to co-ordinate the planning of industrial minerals, to ensure adequate provision is made to support their likely use in industrial and manufacturing processes, and encourage safeguarding or stockpiling so that important minerals remain available for use.

Policy M12: Continuity of supply of silica sand	
1) Proposals for the continuing extraction of silica sand at Burythorpe Quarry, including proposals for lateral extensions or deepening, will be supported in principle where necessary in order to maintain reserves during the period to 2030 and a minimum 10 year landbank for the site. **Compliance with relevant development management policies in the Plan will need to be demonstrated.** **2) Proposals for development of silica sand resources at Blubberhouses Quarry, including proposals for the extension of time to complete existing permitted development, lateral extensions or deepening, will only be supported subject to the satisfactory outcome of assessment in relation to the major development test set out in national policy, the satisfactory outcome of Appropriate Assessment under the Habitats Regulations and where it can be demonstrated that compliance with other relevant development management policies in the Plan can be achieved.**	
Main responsibility for implementation of policy: NYCC and Minerals Industry	
Key links to other relevant policies and objectives	
S01, D04, D06, D07, D08, D10	*Objectives 5, 6*
Monitoring: Monitoring indicator 12 (see Appendix 3)	

Policy Justification

5.59 National policy supports the maintenance or permitted reserves of silica sand, in order to provide a minimum 10 year supply at individual sites, or a 15 year supply where significant new investment is required.

5.60 Within the Plan area active production takes place at a site at Burythorpe Quarry and the current permission is valid until 2042. Burythorpe Quarry provides a large proportion of the UK market share of resin coated sand, as well as supplying markets outside the UK.

5.61 There are no published national or local forward projections of likely demand for silica sand and specific data on production and reserves at Burythorpe Quarry is currently confidential, although it is understood that remaining reserves at the site are substantial in relation to typical output. Nevertheless it is possible that factors including variability in the quality of the resource may lead to a need for release of further reserves for Burythorpe Quarry during the plan period, although specific proposals to achieve this have not yet been identified by the operator.

5.62 A number of constraints to future development may exist at Burythorpe Quarry, including the presence of a Roman villa in proximity to the site. These would need to be addressed if any specific proposals for extension are brought forward.

5.63 The resource of silica sand located at Blubberhouses Quarry overlaps with internationally important nature conservation designations and falls within the Nidderdale AONB. The site has been dormant since 1991 and the original permission has now expired, although prior to expiry an application for an extension of time was submitted, which is currently undetermined. The location of the site within the Nidderdale AONB means that any proposals for further development involving minerals extraction will need to satisfy the major development test set out in the National Planning Policy Framework, as well as Policy D04 of the Joint Plan. The proximity of designated internationally important nature conservation sites also means that Appropriate Assessment under the Habitats Regulations will be needed. As a result of these major constraints, testing of the acceptability of future development in this location can only be properly resolved through the submission and determination of specific proposals in the form of a planning application.

5.64 The national policy requirement for availability of reserves at the Blubberhouses site would be met in the event that planning permission for the current application for an extension of time is granted.

5.65 It is understood that silica sand is imported from a site in Norfolk to a glass manufacturer located in Selby district. Due to the specific properties of the silica sand needed to produce the quality of glass required it is not considered that suitable resources are currently available within the Joint Plan area. Evidence indicates that emerging land use plans in Norfolk are seeking to make provision for continued extraction of silica sand in that area, which would enable this supply arrangement to continue should the market require.

Sustainability Appraisal

Supporting these two sites and the deepening or extension of them could lead to a range of negative effects. These are outlined in the site sustainability report. Major positive effects are also identified for the economy objective, as silica sand is a nationally significant mineral resource.

While the development management policies should help moderate many of the effects noted, particular issues that would need satisfactory resolution include the Blubberhouses site's potential impact on peat and possibly deep peat, as well as any issues that might be identified through appropriate assessment of the effects of the Blubberhouses site on the blanket bog habitats and species associated with the North Pennine Moors SAC / SPA.

Recommendations:
Appropriate mitigation should be incorporated at each allocation site in line with the Site Sustainability Appraisal findings (where relevant) and with other policies in the Plan. Cumulative impacts should be given particular regard through the planning application process.

Q04. Ref M12

Do you support the preferred policy approach? If not how should it be changed and why?

Clay

5.66 Potential resources of clay are widely distributed in the Joint Plan area, mainly in the lower lying central part of NYCC and within the City of York. The quality of clay resources is likely to be very variable and workable deposits may be much more limited in distribution. The principal clay resource in the Joint Plan area is brick clay, although small amounts of fireclay are also likely to be present, in association with shallow coal which has not itself been subject of any commercial interest, as well as clay suitable for engineering purposes. There are only a small number of active sites, all located in the NYCC area. The main uses of clay worked in the Joint Plan area are for brick manufacture (at Aine Brickworks) and for the manufacture of lightweight aggregate blocks (at the Plasmor site at Great Heck in Selby District, which is served by clay from the nearby Hemingbrough Clay Pit).

5.67 Deposits of brick clays also occur in the Heworth, Layerthorpe, Dringhouses and Acomb areas in City of York. Historically, brick clay has also been extracted in the City of York area, although there have been no workings or brick making industry in York for over 50 years.

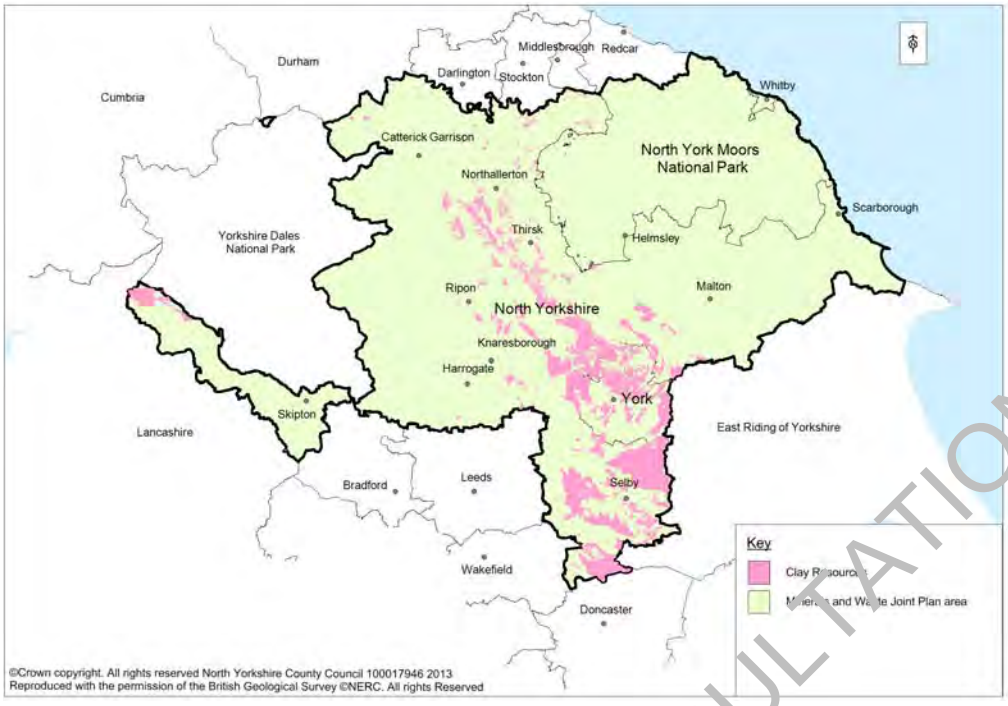


Figure 11: Clay resources in the Joint Plan area

Policy M13: Continuity of supply of clay

The provision of sufficient permitted reserves of clay in order to provide a 25 year supply for existing manufacturing operations at Alne Brickworks and Plasmor Blockworks, Great Heck, is supported.

Additional reserves to help meet this requirement are provided through a site allocation for:

1) **Allocations required in order to meet requirements during the plan period:**

   Land to north of Hemingbrough clay pit (MJP45)

Proposals for development of this site will be supported subject to compliance with the development management policies in the Plan.

2) **Allocations potentially required to contribute to maintaining longer term supply for Plasmor Blockworks:**

   A Preferred Area on land adjacent to former Escrick Brickworks (MJP55)

Proposals for development within this site will be supported only where it can be demonstrated that additional reserves are required in order to maintain an adequate longer term supply of clay to the Plasmor Blockworks site and subject to compliance with the development management policies in the Plan.

Maintenance of supply of clay is also supported through the identification of an allocated site for engineering clay at:

Land north of Duttons Farm, Upper Poppleton (MJP52)

Working of unallocated brick clay resources will be supported where it can be demonstrated that the mineral is needed in order to maintain an adequate supply to existing manufacturing facilities in line with national policy, where sufficient mineral cannot be provided from sites allocated in the Plan and subject to compliance with relevant development management policies in the Plan.

Main responsibility for implementation of policy: NYCC , CYC and minerals industry	
Key links to other relevant policies and objectives	
M14, S01, D01, D02, D06, D07, D09, D10	*Objectives 5, 6*
Monitoring: Monitoring indicator 13 (see Appendix 3)	

Policy Justification

5.68 Clay is identified in national planning policy as a mineral of national and local importance. National policy requires that a stock of at least 25 years supply should be maintained for brick clay in order to provide adequate reserves to serve existing facilities manufacturing clay based products. Policy also requires account to be taken of the need for provision of clay from a number of sources to enable appropriate blends to be made. There are two active brick clay extraction sites in the area supplying associated manufacturing facilities. At one of these sites, Alne Brickworks, planning permission was granted in 2015 for an extension to the mineral extraction area, providing sufficient reserves to meet the national policy requirement.

5.69 Following discussions with the operator, it has been identified that new reserves of clay would be needed at Hemingbrough Quarry in order to maintain continuity of supply to the associated manufacturing facility at Great Heck over the plan period. The operator has identified the potential for future extensions to Hemingbrough Quarry which have been put forward for consideration for allocation in the Plan. A site at Escrick, near York, adjacent to a former tileworks has also been put forward for consideration in order to provide a longer term source of clay for the facility at Great Heck.

5.70 A specific site allocation at Hemingbrough can be identified in the Plan in order to help meet the 25 year supply requirement for the Plasmor blockworks. Identification of this allocation provides a high level of certainty about delivery of the necessary resources. Whilst it is considered that future supply over the plan period for the Plasmor Blockworks would most appropriately be provided via further extension to existing workings at Hemingbrough, resources are also identified in a Preferred Area at Escrick if it is not practicable to provide sufficient reserves at the Hemingbrough site in order to meet the full 25 year national policy requirement. There are a number of significant constraints to development at the Escrick site and any proposals needed in the longer term to maintain supply to the Plasmor Blockworks would need to be carefully located and designed within the Preferred Area in order to ensure protection of the environment and local amenity. It is not expected that development of the whole of the Preferred Area would be acceptable under this policy.

5.71 An allocation for clay extraction is also identified at Duttons Farm, York in order to help provide a local supply of clay for engineering purposes in the City of York area.

5.72 It is recognised that further flexibility may also be appropriate in order to ensure that other resources can be developed if necessary in order to meet the national policy requirement for the supply of clay to existing manufacturing facilities. This could provide flexibility if it is not practicable to deliver the expected amount through the allocated areas, or to facilitate supply of clay of particular quality or technical specifications which may not be available in other permitted sources of supply.

5.73 In all cases any specific proposals will need to comply with relevant development management policies in order to protect the environment and local amenity. Where it is proposed to work unallocated resources at locations away from the manufacturing facility to be served, it will be particularly important to ensure that road haulage impacts are minimised.

Sustainability Appraisal

A wide range of impacts will result from extraction of sand and gravel at the sites specified in this policy. These are outlined in the Site Sustainability Appraisal Report. As many of the site allocations lie in close proximity to other existing or allocated sites, cumulative impacts will be of particular importance.

In terms of unallocated sites, a range of minor positive and negative effects are recorded for most SA objectives as such sites will need to comply with development management policies, which will either control effects or may leave some minor residual effects when they are applied to clay development (such as on soils / land, water and landscape) or may result in minor positive effects (e.g. through mitigation providing a net gain or a high level of protection – as is the case for biodiversity and the historic environment). Strong positive effects are observed in relation the economy, community vitality and population change as ultimately clay extraction supports the brick industry and the wider construction industry and the jobs associated with those industries.

Recommendations:
Appropriate mitigation should be incorporated at each allocation site in line with recommendations in the Site Sustainability Appraisal findings for each site and with other policies in the Plan. Cumulative impacts should be given particular regard through the planning application process.

Q04. Ref M13

Do you support the preferred policy approach? If not how should it be changed and why?

Policy M14: Incidental working of clay in association with other minerals	
The incidental working of clay in association with production of other minerals will be supported, where the incidental extraction of clay would help secure the most sustainable use of resources and would not significantly increase any adverse environmental or amenity impacts associated with the primary working, or the subsequent reclamation and afteruse of the site.	
Main responsibility for implementation of policy: NYCC , CYC, NYMNPA and minerals industry	
Key links to other relevant policies and objectives	
M13, D01, D02, D06, D07, D09, D10	*Objective 5*
Monitoring: Monitoring indicator 14 (see Appendix 3)	

Policy Justification

5.74 In some mineral workings, particularly for sand and gravel and some crushed rock types, the primary mineral occurs in association with clay deposits which sometimes may need to be removed to access the primary target mineral. Such clay deposits can, in some cases, have commercial value and it may be justifiable for them to be extracted and used off site. However, in order for this to represent a sustainable form of mineral extraction, it will be important to ensure that removal off site of incidental clay would not lead to increased overall environmental impacts compared with extraction of the primary mineral or, particularly, that the quality of reclamation and afteruse of the site is not adversely affected. This latter consideration arises because clay materials are often retained on site and replaced in worked out areas to help provide a satisfactory final landform. Where it is proposed to remove such clay

from the site, applicants will need to demonstrate that a satisfactory standard of reclamation and afteruse can still be achieved.

Sustainability Appraisal

The impacts associated with this policy are predominantly neutral to uncertain. The policy would support incidental clay extraction where overall sustainability and environmental / amenity impacts would not be significantly increased. However, there is some uncertainty as to the scope of impacts that will be considered and also stringency in relation to environmental impacts resulting from the primary working is unknown (i.e. there is uncertainty as to what 'not significantly increase any adverse environmental or amenity impacts' might mean in practice).

Some positive impacts would result from this policy as it would increase productivity from mineral extraction, minimising the generation of clay waste, providing a valuable building material and providing positive benefits for the economy.

Recommendations:
No further mitigation is proposed.

Q04. Ref M14

Do you support the preferred policy approach? If not how should it be changed and why?

Building Stone

5.75 Building stone includes material used for roofing, walling, flagstones or ornamental purposes. There are currently 15 active building stone quarries in the Joint Plan area although historically there have been many more. Sandstones and limestones suitable for use as building stone can be found relatively widely within the Joint Plan area outside the Vale of York and the lower lying parts of Selby District. There are no known resources in the City of York. In many cases it is only certain parts of the resource which may be suitable for use as building stone, as a result of varying geotechnical and aesthetic properties.

5.76 Supply of building stone is important for the upkeep of traditional buildings and historic assets and for ensuring new development reflects the character of its surroundings. It is therefore important in maintaining and enhancing the overall quality of the environment in the Plan area. There are many historic buildings in the Joint Plan area, including within the City of York, which require high quality building stone for repair and renovation work. The colour and appearance of stone varies greatly depending on where it is found, which means that building stone must often be sourced locally if the character and appearance of local buildings is to be maintained.

5.77 The National Planning Policy Framework requires planning authorities to include policies for the extraction of building stone and to meet demand for small scale extraction of building stone needed for the repair of historic assets at, or close to, former quarries. It is unlikely that requirements for building stone for 'ad hoc' repairs will be sufficient for it to be viable to fully re-open quarries and therefore it is essential that policies support their limited operation on a temporary basis.

5.78 Building stone is a relatively high value and sometimes scarce product and in some instances stone worked in the Plan area is exported from the area in response to

market requirements. Although evidence on future requirements for building stone is very limited, consultation suggests that demand for stone from the Plan area is likely to remain and, potentially, increase during the plan period.

Policy M15: Continuity of supply of building stone

In order to secure an adequate supply of building stone, proposals will, where consistent with other policies in the Plan, be supported for:-

- **i) the extension of time for completion of extraction at permitted building stone extraction sites;**
- **ii) the lateral extension and/or deepening of workings at permitted building stone extraction sites;**
- **iii) the re-opening of former building stone quarries in appropriate locations;**
- **iv) the opening of new sites for building stone extraction in appropriate locations, including the small scale extraction of building stone at new sites adjacent to existing historic buildings or structures where the use is specifically for their repair;**
- **v) the incidental production of building stone in association with the working of crushed rock;**
- **vi) the grant of permission on sites allocated in the Plan for working of building stone.**

Where development is proposed in the National Park and AONBs under criteria i to iv above and where the development comprises major development due to its scale and the nature, proposals will need to meet the requirements for major development set out in Policy D04.

Proposals for the supply of building stone should be supported by evidence to demonstrate the contribution that the stone proposed to be worked would make to the quality of the built and/or historic environment in the Plan area and/or to the meeting of important requirements for building stone outside the area and the scale of the proposal should be consistent with the identified needs for the stone.

For proposals for supply of building stone from locations within the National Park or AONBs, it will need to be demonstrated that the stone is required primarily to meet requirements arising from new build or repair work within the National Park and/or AONBs or is for the repair of important designated or undesignated buildings or structures which rely on the proposed source of stone as the original source of supply, or can provide a directly equivalent product which can no longer be provided from the original source quarry.

Additional reserves to help maintain supply of building stone are also provided through a site allocation for:

Land at Brows Quarry (MJP63).

Main responsibility for implementation of policy: NYCC , CYC and minerals industry	
Key links to other relevant policies and objectives	
M10, S01, D04, D08	*Objectives 3, 6, 9*
Monitoring: Monitoring indicator 15 (see Appendix 3)	

Policy Justification

5.79 Building stone quarries are typically relatively small in scale but, as a result of the need to source stone of particular technical or aesthetic properties, may sometimes be proposed in relatively sensitive locations and can therefore give rise to impacts on the environment or local amenity. It is therefore particularly important that proposals can demonstrate compliance with other relevant policies in the Plan.

5.80 Stone with suitable technical and aesthetic properties to meet requirements for high quality new build and repair work is understood to be relatively scarce in the Plan area and is a finite resource. Substantial export of such stone out of the area, in order to meet a general market requirement for building stone, may over time reduce the availability of high quality indigenous sources of supply with the right technical and aesthetic properties to match the existing built or historic environment in the area.

5.81 It is nevertheless recognised that in some instances it may be appropriate for high quality building stone worked in the Plan area to serve wider markets, including in cases where stone from the Plan area has been used in important buildings and structures elsewhere or can provide a similar match to stones which are no longer available elsewhere. It is therefore important that applications for working of high quality stone such as ashlar are accompanied by supporting information on requirements for the stone, including for example reference to the Strategic Stone Study (a national study led by Historic England working with the British Geological Survey which identifies the most significant building stone resources as well as, in some cases, the original sources of stone for particular buildings or settlements).

5.82 It is also recognised that the extraction of local building stone can have a positive impact in terms of enhancing the built environment of National Parks and AONBs. However unrestricted extraction of stone for exportation to other areas may have harmful effects both in terms of the scale of extraction in these highly protected areas and potential exhaustion of existing resources. The building stones used in the Howardian Hills and the National Park are often sourced from the same geological structures and therefore it is considered appropriate to provide flexibility for building stone extracted from the Park to be used in the Howardian Hills and vice versa as this will help to retain the characteristics of both areas. In many cases, proposals for significant new working of building stone in the National Park and AONBs will also need to satisfy the requirements for major development set out in national planning policy and policy D04 of the Plan.

5.83 There may be occasions where suitable stone resources are available immediately adjacent to the site where they will be utilised and, as this can represent a sustainable option, in these cases limited extraction specifically to serve repair needs for adjacent existing historic structures or buildings will be supported in principle.

5.84 In some cases, building stone is worked as an ancillary product in association with extraction of crushed rock aggregate. Where suitable stone exists it is considered that this can be a sustainable form of development as it can help contribute to overall supply of building stone without substantial additional adverse impacts. Where proposals are brought forward for the ancillary supply of building stone at crushed rock quarries, proposals should contain information about any specific or additional impacts associated with the proposed working of building stone in order that appropriate mitigation can be considered if necessary.

5.85 Only two proposed allocations of land for building stone extraction have been put forward for consideration during preparation of the Plan. Of these only one site (land at Brows Quarry MJP63) is considered suitable for allocation at this stage for environmental reasons. This site has recently had the benefit of permission for working, although the permission has now expired. Proposals for working this site would need to demonstrate compliance with the development management policies in the Plan.

Sustainability Appraisal

It is considered that this policy would provide an adequate supply and range of building

stone to market and therefore positive impacts have been recorded in relation to the economy, community viability and vitality and meeting the needs of a changing population. The policy would enable building stone to be extracted in close proximity to historic assets or from former quarries where required in order that the correct type of stone can be sourced, conserving the historic environment of an area and the character of its heritage assets. This would result in minor to major positive impacts in relation to the historic environment and landscape objectives.

Although building stone extraction tends to be a relatively small scale operation, negative impacts have been identified in relation to a number of the environmental objectives as this policy is likely to result in an increase in active building stone sites with associated biodiversity, water, air quality, recreation, landscape and amenity impacts.

Recommendations:
No further mitigation is proposed.

Q04. Ref M15

Do you support the preferred policy approach? If not how should it be changed and why?

Hydrocarbons

Introduction

5.86 National planning guidance states that both conventional and unconventional hydrocarbons (oil and gas) are minerals of national and local importance and that minerals plans should include policies for their extraction. Conventional hydrocarbons are oil or gas which has accumulated in a 'reservoir' of porous rock such as sandstone or limestone and which can be extracted by conventional drilling techniques. There is no known oil resource in the Joint Plan area but resources of gas are present and have been exploited over a substantial period of time. Conventional gas reserves are present in the eastern part of the Joint Plan area and licences for their exploration, appraisal and development have been granted in blocks around the western fringe of York, to the east in the Vale of Pickering and within the North York Moors. More recently, there has been interest in unconventional hydrocarbons as a form of energy supply. These are hydrocarbons which cannot be extracted by conventional techniques and include sources of hydrocarbons such as coal bed methane, methane capture from coal mines, underground coal gasification, as well as shale gas.

5.87 To date there has been no history of coalbed methane, coal gasification or shale gas production in the area, although methane has been extracted from coal mines in Selby District over a number of years.

5.88 Coalbed methane is produced during the process of coal formation. The gas is either adsorbed onto the coal or dispersed into pore spaces around the coal seam. Coalbed methane can be extracted from coal seams which have not been mined and the exploitation typically involves drilling a network of wells, with the gas typically being extracted via the well through natural pressure release or through the pumping of water from the seam in order to reduce pressure. Exploration has taken place to the north of York in recent years, however there is no current expectation that production will be brought forward in the foreseeable future.

5.89 Like coal-bed methane extraction, underground coal gasification can be carried out on seams of coal which have not been mined. It is achieved by drilling boreholes into the coal seam, injecting water/oxygen mixtures down one pipe, igniting and partially combusting the coal and extracting the gasification products through another pipe. It produces a mixture of gases including carbon monoxide, carbon dioxide, hydrogen and methane that can be processed to provide fuel for power generation, vehicle fuels and chemical food stocks. There is no known current commercial interest in this source of gas in the Plan area.

5.90 Shale gas is found within organic-rich shale beds or other fine grained rocks with low porosity, rather than in a conventional 'reservoir', although the gas itself is the same as other forms of natural gas and could provide both industrial and domestic power. Resources of shale gas in the UK are likely to occur at depths of between 1500m and 4200m. By contrast, typical ground water levels go down to depths of around 400m[13].

5.91 A recent British Geological Survey report 'The Carboniferous Bowland Shale Gas Study: Geology and Resource Estimation' (July 2013) identifies a prospective area for shale gas in both the Upper and Lower Bowland Hodder Unit, which extends at depth right across northern England and in particular identifies possible resources in Ryedale, Scarborough, Hambleton and Selby Districts, as well as the North York Moors and York. However, it remains unclear as to whether the resource is commercially viable. The exploitation of shale gas in the UK involves relatively unfamiliar technologies, such as hydraulic fracturing ('fracking'), however it has the potential to be an important new source of energy for the UK and the Government is currently encouraging exploration for this form of gas. New Government licensing areas for oil and gas exploration and development, known as PEDLs, are expected to be announced shortly (see Fig. 12). Specific proposals for exploration and appraisal of shale gas in the Vale of Pickering were submitted in July 2015.

5.92 In an Autumn 2012 Statement the Chancellor set out the Government's overall strategy for gas to ensure that the best use is made of gas power, including new sources of gas under the land. In October 2014 the Government published planning practice guidance for onshore oil and gas including unconventional sources, to give more certainty to the industry and local authorities taking planning decisions on onshore oil and gas about the sorts of considerations they should take into account. Amongst other matters, the guidance indicates that hydrocarbons remain an important part of the UKs energy mix whilst the country transitions to low carbon energy supplies. More recently, in August 2015, the Government announced plans to ensure that proposals for hydrocarbon development are determined within the 16 week statutory timeframe. In addition, changes to the Town and Country Planning (General Permitted Development) (England) Order 2015 now mean that much of the early exploration work for new hydrocarbon developments in locations outside designated areas can take place without the requirement for planning permission.

5.93 The recent Infrastructure Act 2015 states that consents will not be granted for hydraulic fracturing where it takes place within "other protected areas". The descriptions of areas which are "other protected areas" are set out in the draft Statutory Instrument and include land at a depth of less than 1,200 metres beneath National Parks, AONBs and World Heritage Sites[14]. The draft legislation also provides protection to groundwater source areas at a depth of less than 1200 metres below the surface used for domestic or food production purposes.

[13]The Draft Onshore Hydraulic Fracturing (Protected Areas) Regulations 2015 provides protection to certain groundwater source areas at a depth of less than 1200 metres beneath the surface

[14] Draft Statutory Instrument: The Onshore Hydraulic Fracturing (Protected Areas) Regulations 2015

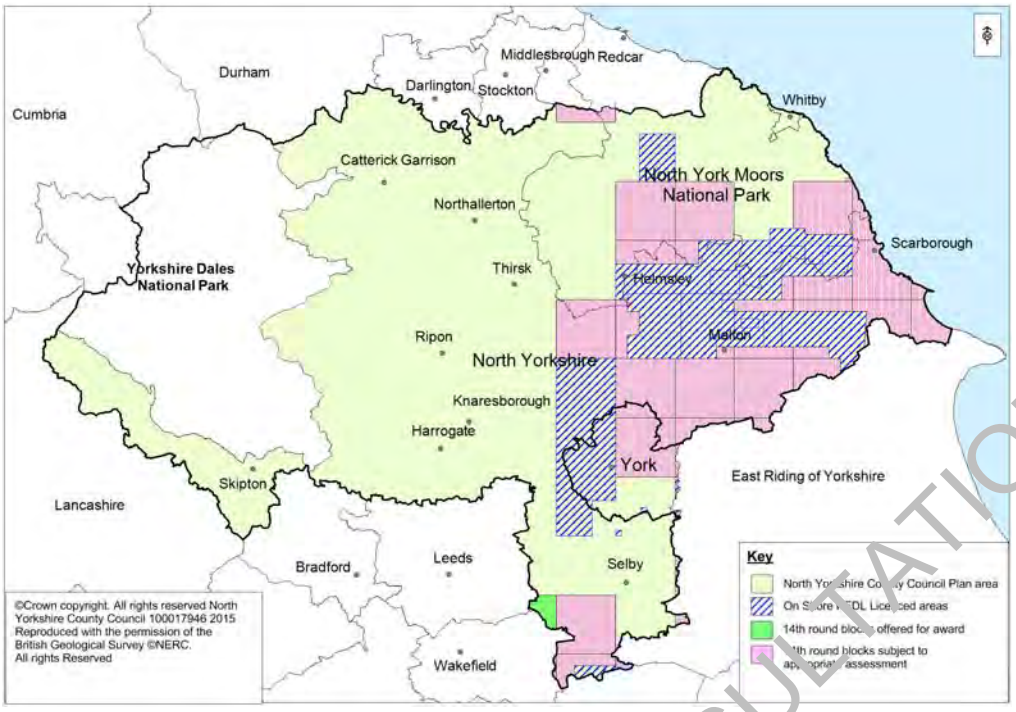


Figure 12: PEDL licence blocks and blocks offered in 14th round licencing.

Summary of the process

5.94 There are three main phases of onshore hydrocarbon extraction:

- Exploration - seeks to acquire geological data to establish whether hydrocarbons are present. It may involve seismic surveys, exploratory drilling and, in the case of shale gas, hydraulic fracturing. For conventional hydrocarbons, exploration drilling onshore is a short-term, but intensive, activity. Typically, site construction, drilling and site clearance will take between 12 to 25 weeks. For unconventional hydrocarbons exploratory drilling may take considerably longer, especially if there is going to be hydraulic fracturing and, in the case of coalbed methane, removing water from the coal seam.

- Appraisal - takes place following exploration when the existence of oil or gas has been proved, but the operator needs further information about the extent of the deposit or its production characteristics to establish whether it can be economically exploited. The appraisal phase can take several forms including additional seismic work, longer-term flow tests, or the drilling of further wells. This may involve additional drilling at another site away from the exploration site or additional wells at the original exploration site. For unconventional hydrocarbons it may involve further hydraulic fracturing followed by flow testing to establish the strength of the resource and its potential productive life. Much will depend on the size and complexity of the hydrocarbon reservoir involved.

- Production - normally involves the drilling of a number of wells. These may be at sites used at the exploratory and/or appraisal phases of hydrocarbon development, or from a new site/s. Associated equipment such as pipelines, processing facilities and temporary storage tanks are also likely to be required. Production can be up to 20 years or more.

5.95 Planning permission is required for each phase of hydrocarbon extraction, although some initial seismic survey work may have deemed consent under Part 2 of Schedule 2 to the Town and Country Planning (General Permitted Development) Order 1995. In order to explore, test and produce oil and gas in the UK operators must first obtain a Petroleum Exploration Development Licence. In 2014 the government commenced a new round of on shore licensing (see also Paragraph 2.69).

5.96 The following diagram illustrates the process for applications, taken from Annex B of Planning Practice Guidance for Onshore Oil and Gas, 2013, Department for Communities and Local Government. Further details of the regulatory regimes are discussed later.

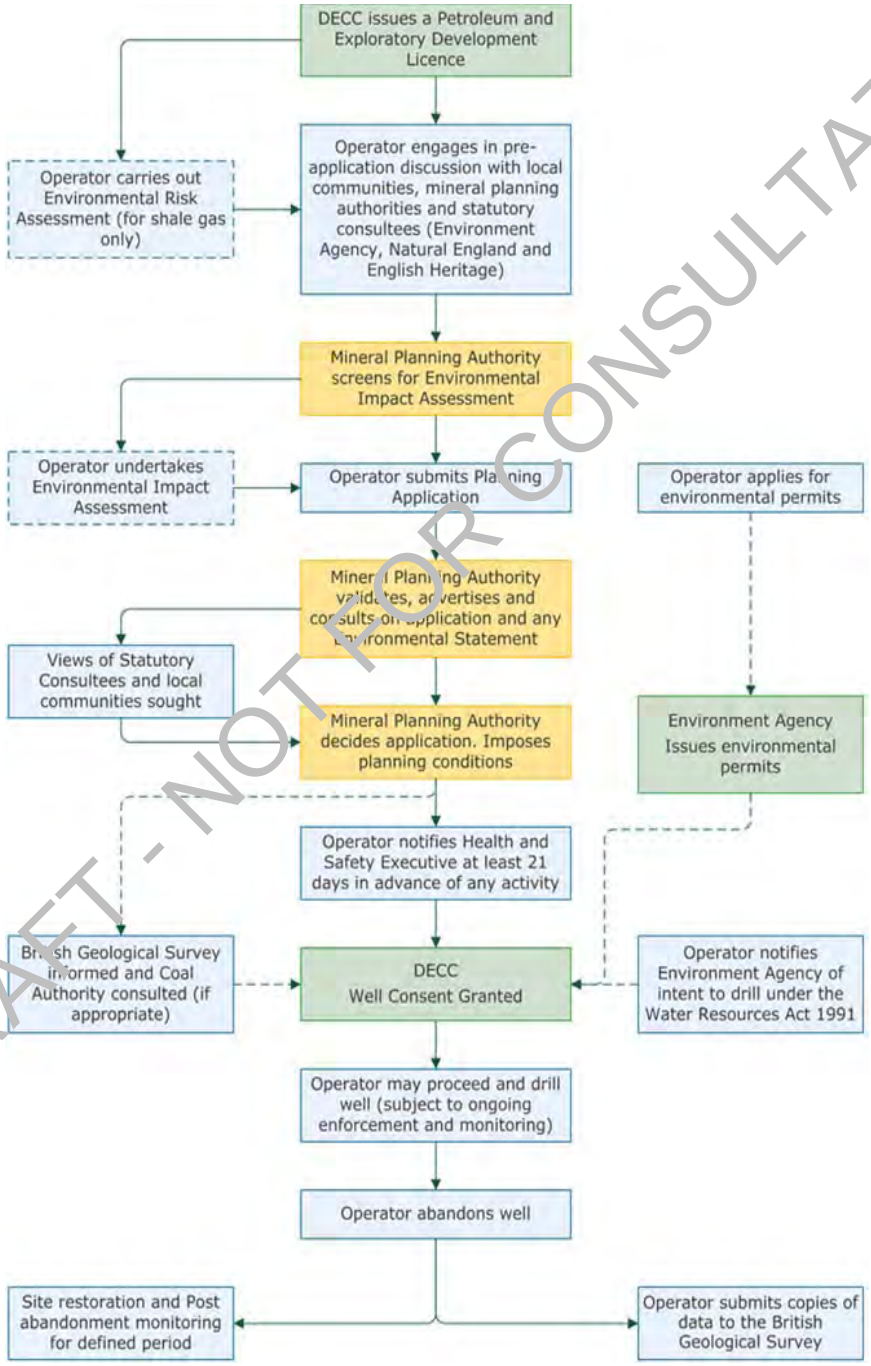


Figure 13: Summary applications process

5.97 With all hydrocarbon appraisal or production, whether conventional or unconventional, a well is drilled and several stages of metal pipes are set in concrete to seal and help prevent any contamination with ground water. In some cases, particularly for shale gas wells, horizontal drilling at depth may take place to enable maximum exposure to the gas resource. Gas held within shale beds or other rocks of low porosity is accessed through a technique called “hydraulic fracturing” (fracking) which involves injecting the fracture with liquid at high pressure. Small particles (usually sand) are also pumped into the fractures to keep them open when the pressure is released so that the gas can flow into the well. Although typically 98-99% of the liquid is water small quantities of chemicals are often added. Operators must demonstrate to the Environment Agency that all the chemicals used in the process are non-hazardous. Once the rock has been fractured some fluid returns to the surface (known as flow-back) and this will require disposal or recycling in accordance with the required environmental permits.

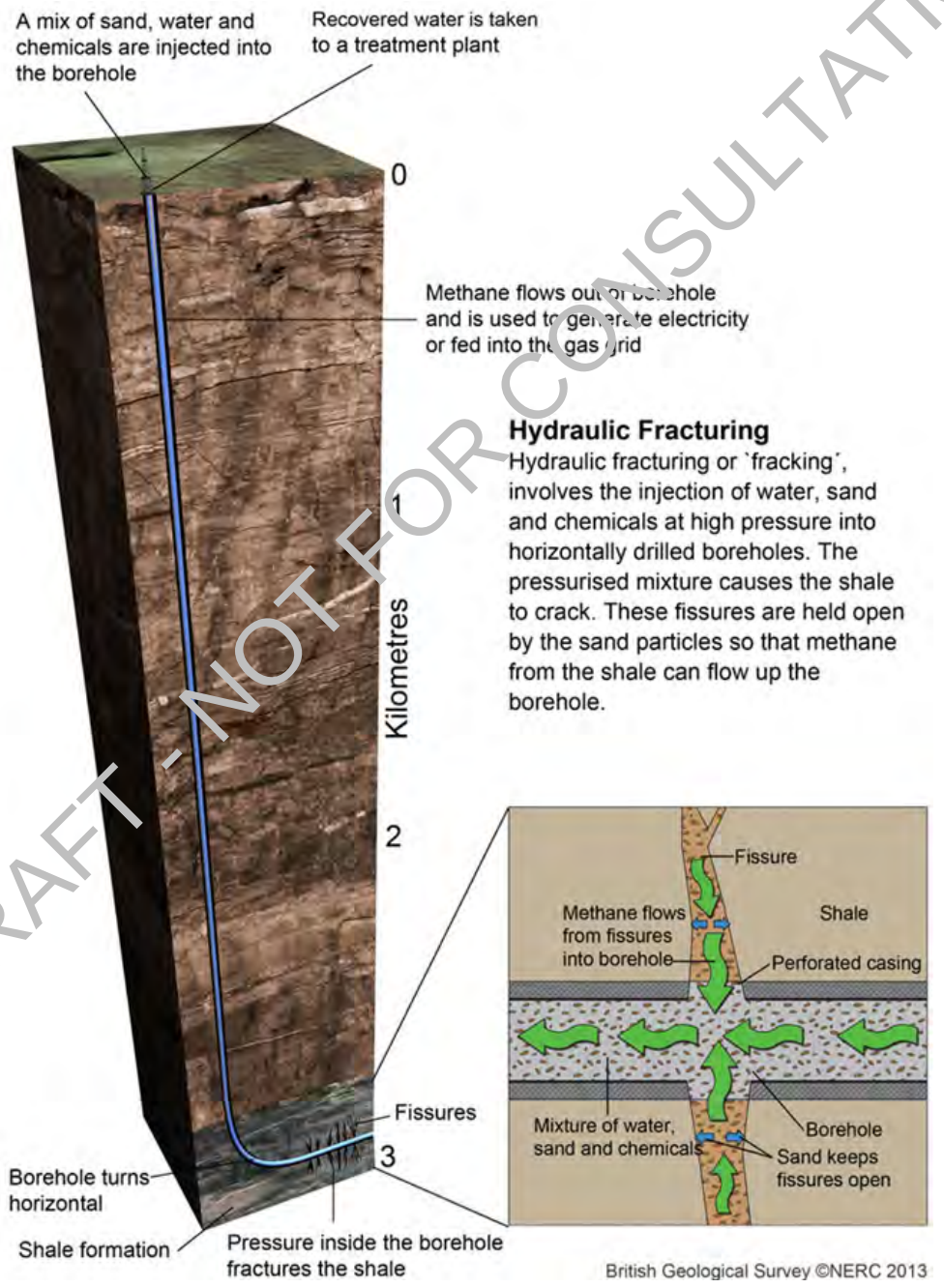


Figure 14: Hydraulic fracturing process[1]

5.98 If significant environmental impacts are likely the minerals planning authority will require the applicant to undertake an Environmental Impact Assessment (EIA). It is a principle of the EIA regulations that 'projects' cannot be 'salami sliced' to avoid proper application of the regulations. If EIA is required it is expected that applicants will submit sufficiently detailed information to allow the impact of the whole development to be considered.

5.99 The United Kingdom Onshore Operators Group (UKOOG) has established a charter for community engagement on new onshore oil and gas proposals. The charter sets out a number of commitments for operators which includes engagement with local communities at each of the 3 stages of operations.

5.100 Concerns have been expressed about the potential impacts of the hydraulic fracturing (fracking) techniques used in extraction of shale gas, in particular in relation to matters such as pollution of ground and surface water, use of water resources, air pollution and the potential for ground movements (i.e. earth tremors) to be triggered. The planning system controls the development and use of land in the public interest and needs to ensure that development is appropriate for its location taking account of the effects (including cumulative effects) of pollution on health, the natural environment or general amenity and the potential sensitivity of the area or proposed development to adverse effects from pollution. The focus of the planning system is on whether the development itself is an acceptable use of the land. Outside of the planning legislation applicants will need to satisfy a number of other regulatory regimes. In accordance with Government advice, the Minerals Planning Authorities will assume that these non-planning regimes will operate effectively.

Other regulatory regimes

5.101 The Department of Energy and Climate Change (DECC) is responsible for issuing licences which grant exclusivity to operators in the licencing area to explore and produce hydrocarbons. Responsibility for final consent for drilling also lies with DECC who will check with the Environment Agency and Health and Safety Executive (HSE) that they have no objections and review the operator's plans to minimise the risk of seismic activity before giving consent.

5.102 Each proposal site is assessed by the Environment Agency, who regulate discharges to the environment, issue water abstraction licences, and are statutory consultees in the planning process. The Environment Agency has issued guidance on this which notes that a mining waste permit will be required for drill cuttings, spent drill muds and drill fluids, flow-back fluids, waste gases and wastes left underground. A permit will also be needed if large quantities of gas are to be flared and for groundwater activities, depending on the local hydrology.

5.103 All drilling operations are subject to notification to the Health and Safety Executive, who will check operators' plans, assess engineering designs and reports and will be responsible for checking sites to ensure they are meeting the requirements of the relevant legislation. Before drilling begins the Health and Safety Executive regulations require that an independent and competent person examines the well's design and construction. Operators must also notify the Environment Agency of their intention to drill.

5.104 A key public concern in relation to hydraulic fracturing is the risk of earth tremors. The 2014 DECC publication 'Fracking UK Shale: Understanding Earthquake Risk' refers to the small tremors which took place following fracking activity at Preese Hall near Blackpool in 2011. It says "the tremors measured magnitude 2.3 and 1.5 on the Richter scale. Earthquakes of this size are not normally felt at the

surface…[they]…were probably caused when frack fluids flowed into a geological fault, a crack running through one or more layers of the underground rocks". In 2012 DECC introduced measures to control seismic risks from fracking. Operators are now required to assess the location of any relevant faults before fracking operations can take place. Operators must submit to DECC a plan of operations starting with small test fractures before main operations and install real-time monitoring systems. Operators must stop and investigate if they detect tremors above the normal range. Where hydraulic fracturing operations are planned the EIA should also include a brief description of the proposed traffic light system for monitoring induced seismicity. Further guidance on the regulation for hydrocarbon proposals is set out in the 'Onshore Oil and Gas Exploration in the UK: regulation and best practice. A diagram illustrating the DECC 'traffic light' system is provided below.

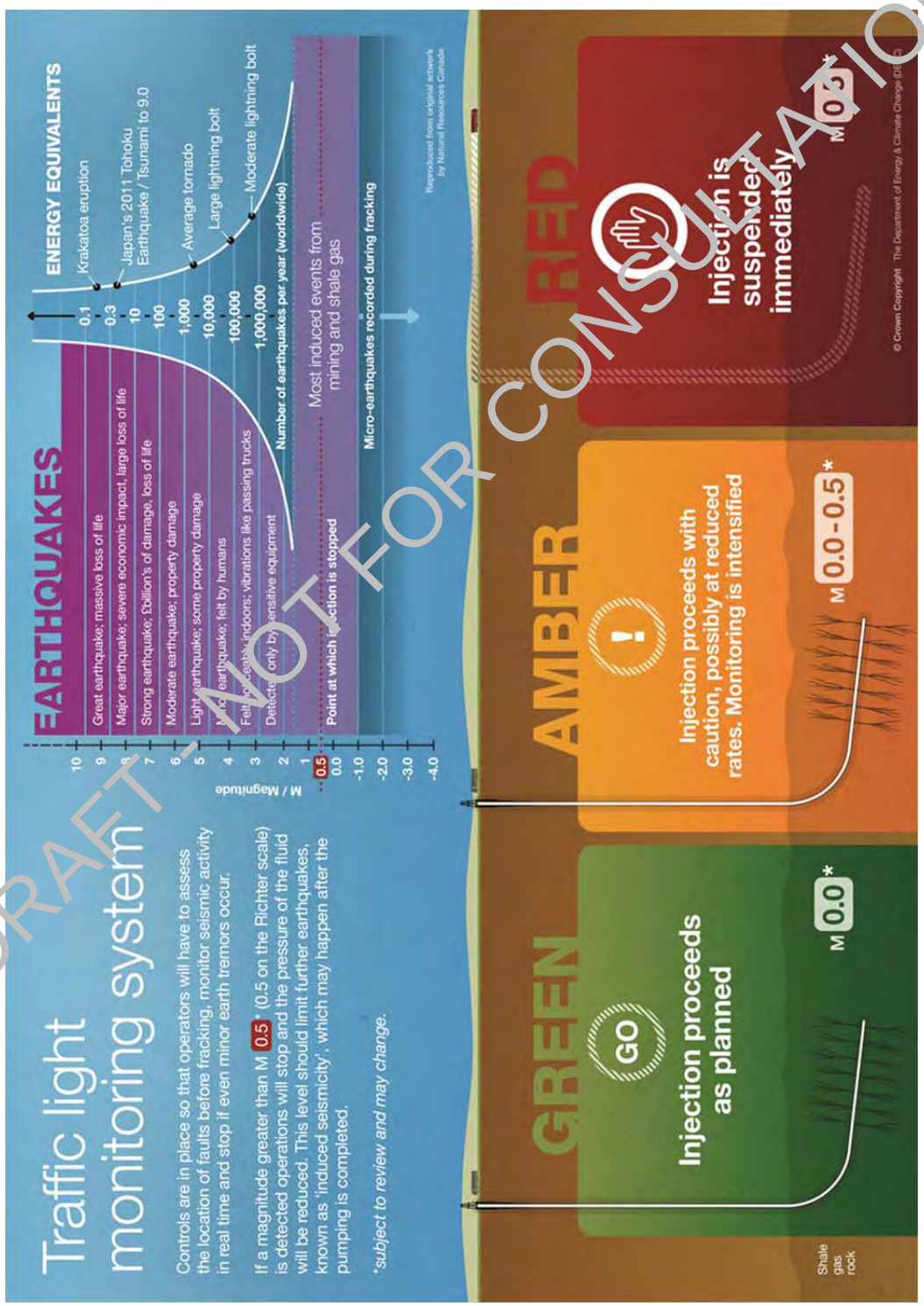


Figure 15: DECC traffic light system for regulation of hydrocarbons

5.105 Planning guidance and case law makes it clear that Minerals Planning Authorities do not need to carry out their own assessments of potential impacts which are controlled by other regulatory bodies and that they can determine applications on the advice of those bodies without waiting for the related approval processes to be concluded. Although these issues will need to be determined through other regulatory frameworks their views will need to form part of the decision making process of the Minerals Planning Authority, to the extent that they relate to the use and development of land.

5.106 A range of other issues and impacts may be associated with exploration, appraisal and development of oil and gas resources, including visual impact and impacts on the landscape as a result of the presence of drilling rigs and other equipment, noise, vibration and air pollution and impacts from traffic. Traffic may be a particular consideration for shale gas development due to the need, in some cases, to bring in substantial quantities of water and other materials and to dispose of waste water. The availability of suitable water resources may also need to be considered. The potential for impact on health may be a key concern to local communities. The wider public health implications of development proposals can be a relevant planning consideration depending on the nature of the proposed development and other factors such as the location of the site.

5.107 As the distribution of possible gas resources in the Joint Plan area overlaps with a wide range of potentially sensitive locations and assets there is potential for conflict between development, and the benefits that could arise from this, and impacts on the environment and local amenity, including within particularly sensitive parts of the Plan area such as the North York Moors National Park and the Howardian Hills AONB. This suggests that it will be important to ensure that appropriate policy protection is in place.

Policy M16: Overall spatial policy for hydrocarbon development

Proposals for development of unconventional hydrocarbons, including proposals involving hydraulic fracturing, will not be supported where they are located within the National Park, AONBs, Protected Groundwater Source Areas and World Heritage Sites.

For conventional hydrocarbons development within and lateral hydraulic fracturing underneath designated areas identified above, applicants will need to demonstrate that all options for undertaking the development in other, non-designated, areas licenced to the applicant by DECC have been fully considered before bringing forward proposals in designated areas. Where such proposals located in the National Park or AONBs are considered to comprise major development they will be refused except in exceptional circumstances in accordance with Policy D04.

Where proposals are within or in close proximity to the National Park and AONBs special care must be taken to avoid harming the setting and/or special qualities of these designated areas.

Proposals for conventional and unconventional hydrocarbons development across the rest of the Plan area will be supported where it can be demonstrated that there would be no unacceptable impacts, taking into account proposed mitigation measures, on the environment or on local amenity or on the setting of heritage assets including the historic City of York and where they are consistent with other relevant policies in the Plan. Particular regard will be had to protecting designated Green Belt from harm resulting from hydrocarbons development.

In determining proposals, consideration will be given to any cumulative impacts

arising from other hydrocarbon development activity in proximity to the proposed development, including any impacts arising from successive hydrocarbons development taking place over substantial periods of time. Proposals will be supported where there would be no unacceptable cumulative impacts.	
Main responsibility for implementation of policy: NYCC , NYMNPA, CYC and District and Minerals industry	
Key links to other relevant policies and objectives	
M17, M18, M19, I02, S01, S05, D02, D04, D05, D06, D07, D08, D09, D10	*Objectives 5, 6, 9, 10, 12*
Monitoring: Monitoring indicator 16 (see Appendix 3)	

Policy Justification

5.108 Natural gas was first discovered in the geology of the North York Moors in the 1940's. In the 1970's gas was extracted from a wellhead in the National Park and processed at a site in Pickering, however the operation ceased after a short period of time as a result of the wells producing water. In 1994 the Knapton gas and power generation plant was commissioned by Scottish Power with its gas supplies sourced from outside the National park within the Vale of Pickering at Kirby Misperton, Marishes, Cloughton and Pickering and production still continues. The operator of the Knapton plant has carried out some exploratory drilling within the North York Moors National Park with a view to extracting the gas and sending it through a pipeline to the processing plant. In the past the exploration and appraisal of gas resources has been carried out without harming the special qualities of the North York Moors, however each proposal will need to be assessed on its own merit.

5.109 The NPPF indicates that great weight should be given to conserving landscape and scenic beauty in National Parks and AONBs, which have the highest status of protection in relation to landscape and scenic beauty. The Government has set out through draft secondary legislation to the Infrastructure Act that fracking will not be supported at sites within National Parks, protected groundwater source areas and world heritage sites. However the draft Regulations[15] only refer to fracking at a depth of less than 1,200m below the surface within these areas and it is therefore considered that the starting point in all applications for unconventional and conventional hydrocarbon proposals should be to steer development away from these areas unless it can be fully demonstrated that this is not feasible. Further details on how proposals are assessed in terms of the major development test are set out in Policy D04.

5.110 The National Park Authority's key statutory duties are to conserve and enhance the natural beauty, wildlife and cultural heritage of the National Park and to promote opportunities for the understanding and enjoyment of its special qualities by the public. These purposes were originally stated in the 1949 Act and have more recently been restated in the Environment Act of 1995. Section 62 of the 1995 Act also inserted section 11A into the 1949 Act. That obliges all public authorities to have regard to the statutory purposes of the National Park when exercising their relevant functions. Major development close or adjacent to the boundary of these areas can have a significant impact on the qualities for which they were designated and therefore the impact of proposals on these areas should be carefully considered.

5.111 Although areas such as National Parks and AONBs are particularly significant constraints to future development of this nature, it is important that the whole of the Joint Plan area is provided with appropriate protection from potential harm to local communities and the environment as a result of hydrocarbons development, whether

[15] The draft Onshore Hydraulic Fracturing (Protected Areas) Regulations 2015

for conventional or unconventional resources. It will therefore be necessary for all proposals to demonstrate compliance with other relevant policies in the Plan, including Policies M17 and M18 and the development management policies in Chapter 9.

5.112 The relatively flat and low lying landscape of York allows for long distance views of the Minister and other landmark buildings, which are integral to the setting of the Historic City. For this reason applicants will need to carefully consider the setting of the City when designing and siting proposals and ensure there are appropriate mitigation measures to prevent any harm. Where proposed development would be located in the Green Belt consideration will also need to be given to the effect of proposals on the purpose of the Green Belt designation. Further details on the Green Belt can be found in Policy D05.

5.113 The nature of hydrocarbons development, particularly for unconventional hydrocarbons such as shale gas, means that development may be proposed incrementally within a given area, potentially over substantial periods of time. This may arise as a result of the need to drill progressively more wells, or re-fracture existing wells, in order to extend production or stimulate the flow of gas in a given location and in order to ensure an appropriate return on investment on items such as processing infrastructure. This has the potential to lead to cumulative impacts as more development is proposed in a given area, and to the potential for incremental increase in impacts on the environment or local communities. It will be important to ensure that any such impacts are assessed and taken into account in considering proposals for hydrocarbons development. In this respect it is unlikely that hydrocarbons development on a substantial scale and/or over substantial periods of time, particularly where multiple surface sites are likely to be required, will be considered acceptable within the Green Belt or in other sensitive locations.

Sustainability Appraisal

This preferred option exhibits a range of mostly minor effects, some positive and some negative. Most positive effects occur because the preferred policy steers development away from protected areas such as National Parks and Green Belt, either by not supporting it in such areas or requiring proposals for conventional hydrocarbons in National Parks / AONBs to meet the requirements for major development set out in Policy D04. Negative effects tend to occur because development may concentrate in other areas. Uncertainty is noted as the policy could be made clearer on its links with development management policies.

Recommendations:
To avoid any uncertainty either the policy or supporting text should make a link between this policy and the development management policies.

Q04. Ref M16

Do you support the preferred policy approach? If not how should it be changed and why?

Exploration, Appraisal and Production

5.114 National policy requires mineral planning authorities to distinguish, in their local policies, between the three main phases of oil and gas development (exploration, appraisal and production).

Policy M17: Exploration and appraisal for hydrocarbon resources	
Proposals for the exploration and appraisal of hydrocarbon resources will be supported where they are considered to be in accordance with the overall spatial policy as set out in Policy M16 for onshore hydrocarbon development and the following requirements are met: **i) any unacceptable adverse impact on the environment, local amenity, and heritage assets is avoided or can be appropriately mitigated so far as practicable taking into account the geological target being explored or appraised; and** **ii) a robust assessment has been carried out to demonstrate that there will be no harm to the quality and availability of ground and surface water resources, harm will not arise from ground stability considerations and that public health and safety can be adequately protected; and** **iii) development would be consistent with other relevant policies in the Plan.**	
Main responsibility for implementation of policy: NYCC , CYC, NYMNPA and Minerals industry	
Key links to other relevant policies and objectives	
M16, M18, M19, I02, S05, D02, D04, D05, D06, D07, D09, D11	*Objectives 5, 6, 9, 10, 12*
Monitoring: Monitoring indicator 17 (see Appendix 3)	

Policy Justification

5.115 Exploration may initially begin with seismic investigations to identify prospective structures and may not require planning permission, but applicants must notify the Minerals Planning Authority. Exploration for hydrocarbons can only take place where the gas is expected to be located (i.e. the geological 'target') and typically takes the form of drilling a well, which will normally consist of a vertical well and potentially a small number of lateral extensions. These wells are designed to log and take samples of rock ('core') in order to acquire the geological data from the potential hydrocarbon layers of interest. However in the case of shale gas exploration and appraisal hydraulic fracturing may be required. This exploration stage usually takes place over a relatively short period of time (typically around 12 to 25 weeks, after which the well is capped and the site vacated). Therefore, as long as the activity would not cause significant harm to the environment or local amenity, as a result of the proposed location or specific nature of the development, proposals should be supported. This approach follows the advice set out in National Planning Guidance, which states that planning authorities should not, at the exploration stage, take account of potential future activities, which would need to be considered on their own merits. There is therefore no presumption that sites considered suitable for exploration or appraisal activity will necessarily be considered suitable for subsequent production activities.

5.116 National planning guidance indicates that it is unlikely that an Environmental Impact Assessment will be required for exploratory drilling operations which do not involve hydraulic fracturing. However, when considering the need for an assessment it is important to consider factors such as the nature, size and location of the proposed development before a definitive view can be taken and applicants should seek advice on this matter as necessary, particularly in sensitive areas where thresholds don't apply e.g. National Parks and AONBs.

5.117 Where the exploratory stage has proven the existence of hydrocarbons, the operator may wish to test the resource to establish whether it can be economically exploited. The appraisal of hydrocarbons can take a number of forms and may involve

additional seismic work, longer term flow tests or the drilling of further wells. The appraisal of shale gas resources is likely to involve hydraulic fracturing followed by flow testing in order to establish the economic viability of the resource and its potential productive life.

5.118 Proposals for the exploration and appraisal stage must address the implications, where relevant, of a wide range of matters including traffic, noise, dust, air quality, lighting, visual impact on the local and wider landscape, archaeological and heritage features; traffic; risk of contamination to land; soil resources; impact on best and most versatile agricultural land; blast vibration; flood risk; land stability/subsidence; internationally, nationally or locally designated wildlife sites, protected habitats and species, and ecological networks; impacts on nationally protected landscapes (National Parks and Areas of Outstanding Natural Beauty); nationally protected geological and geo-morphological sites and features; surface and ground water resource and pollution issues; and the need for site restoration and aftercare. When determining applications for the testing of unconventional hydrocarbon resources additional details will also be required on the geological structure, including faulting information and the potential for seismic events.

5.119 Whilst there are a wide range of matters which need to be taken into account in considering proposals, there are a number of specific considerations which may give rise to significant concern to local communities, particularly in relation to development of unconventional hydrocarbons. These include the potential for pollution to water supplies, for example as a result of contamination from fracking fluids, the potential for earth tremors to be triggered and protection of public health and safety. As noted earlier in this Section, other regulatory frameworks exist in relation to control of these matters. However, it is recognised that wider public interest considerations may exist and that relevant land use planning considerations may arise in relation to them. The Mineral Planning Authorities will therefore expect applicants for these forms of development to provide a robust assessment of any potential impacts and to include comprehensive proposals for mitigation and control where necessary.

5.120 All drilling operations are subject to notification to the Health and Safety Executive. Each proposal site is assessed by the Environment Agency who regulates discharges to the environment, issue water abstraction licences, and are statutory consultees in the planning process. The Environment Agency has issued guidance on this which notes that a mining waste permit will be required for drill cuttings, spent drill muds and drill fluids, flow-back fluids, waste gases and wastes left underground. A permit will also be needed if large quantities of gas are to be flared and for groundwater activities, depending on the local hydrology.

Sustainability Appraisal

The preferred policy mostly acts as a positive safeguard against the main impacts of hydrocarbon exploration and appraisal, particularly as it combines with preferred policy M16 and other policies such as the development control policies, though uncertainty is noted as these other policies are as yet unadopted.

There are, however, some minor negative effects. These stem largely from the fact that despite the strong protection in the policy combined with other plan policies, residual effects which are difficult to avoid or mitigate for will remain. For instance, historic environment character, landscape character, biodiversity, community vitality and health and wellbeing were all objectives which reported this residual risk.

The climate change objective reported outright minor negative effects as the policy ultimately supports hydrocarbon exploration and appraisal development which could cause release of fugitive methane or cause emissions of CO2 from traffic, soils and through the

embodied energy of structures on site. A major conflict with the minimising resource use objective was also recorded as proposals brought forward under this policy could eventually lead to non-renewable resource extraction.

Recommendations:
A potential approach to reducing resource intensity, waste and climate change impacts could be through better links to policy D11 'Sustainable Design, Construction and Operation of Development (which requires 'minimisation of waste generated by new minerals and waste development' and 'reduction or minimisation of greenhouse gases') by listing it in the 'key links to other relevant policies and objectives'.

Q04. Ref M17

Do you support the preferred policy approach? If not how should it be changed and why?

Policy M18: Production and processing of hydrocarbon resources

Proposals for the production and processing of hydrocarbon resources will be supported where they are in accordance with the overall spatial policy as set out in Policy M16 for onshore hydrocarbon development and the following requirements are met:

i) **Any unacceptable impact on the environment, local amenity and heritage assets is avoided or can be appropriately mitigated. Where proposals are for unconventional resources particular care will need to be given to demonstrate that there will be no harm to the quality and availability of ground and surface water resources, harm will not arise from ground stability considerations and that public health and safety can be adequately protected; and**
ii) **Transportation of gas from locations of production, including to any remote processing facilities, will be via underground pipeline, with the routing of pipelines selected to have the least environmental or amenity impact; and**
iii) **Proposals are in accordance with other relevant policies in the plan.**

Where practical, a co-ordinated approach should be adopted through the preferential use and/or adaptation of any available and suitable processing and transport infrastructure for the processing and transport of any new gas finds. In relation to any development of new gas resources not accessible to available and suitable processing infrastructure, preference will be given to siting of new processing infrastructure on brownfield, industrial or employment land, particularly where there are opportunities for use of combined heat and power. Where this requirement cannot be met applicants should seek to steer new development sites away from best and most versatile quality agricultural land. The Minerals Planning Authority will support co-ordination between licence operators and encourage the development of shared processing infrastructure where this will help reduce overall impacts on the environment and local amenity.

At the end of production facilities should be dismantled and the site restored to its former use or other agreed use in accordance with Policy D10 Reclamation and after-use of minerals and waste sites.

Main responsibility for implementation of policy: NYCC , CYC, NYMNPA and Minerals industry	
Key links to other relevant policies and objectives	
M16, M17, M19, W07, I02, S05, D02, D04, D05, D06, D07, D08, D09, D10, D11	*Objectives 5, 6, 9, 10, 12*
Monitoring: Monitoring indicator 18 (see Appendix 3)	

Policy Justification

5.121 The production phase of hydrocarbons development, particularly for unconventional resources, usually involves the drilling of a number of wells, which may be at the sites drilled at exploration or testing stages. In addition to the wellhead equipment, development is likely to comprise pipelines for gas transport where processing is to take place away from the well sites and processing equipment, including potentially plant for generation of power using the gas produced. Proposals must address the implications where relevant of a wide range of matters including traffic, noise, dust, air quality, lighting, visual impact on the local and wider landscape, archaeological and heritage features; traffic; risk of contamination to land; soil resources; geological structure, including faulting information; impact on best and most versatile agricultural land; blast vibration; flood risk; land stability/subsidence; internationally, nationally or locally designated wildlife sites, protected habitats and species, and ecological networks; impacts on nationally protected landscapes (National Parks and Areas of Outstanding Natural Beauty); nationally protected geological and geo-morphological sites and features; surface and groundwater resource and pollution issues; site restoration and aftercare. When determining applications for the production of unconventional hydrocarbon resources, additional details will also be required on the geological structure, including faulting information and the potential for seismic events.

5.122 Whilst there are a wide range of matters which need to be taken into account in considering proposals, there are a number of specific considerations which may give rise to significant concern to local communities, particularly in relation to development related to unconventional hydrocarbons. These include the potential for pollution to water supplies, for example as a result of contamination from fracking fluids, the potential for earth tremors to be triggered and protection of public health and safety. As noted earlier in this Section, other regulatory frameworks exist in relation to control of these matters. However, it is recognised that wider public interest considerations may exist and that relevant land use planning considerations may arise in relation to them. The Mineral Planning Authorities will therefore expect applicants for these forms of development to provide a robust assessment of any potential impacts and to include comprehensive proposals for mitigation and control where necessary. Applicants should also have regard to the requirements of Policy D11 relating to the sustainable design, construction and operation of development, in order to help ensure that overall impacts from any proposed development are minimised.

5.123 Once hydrocarbons are extracted they will need to be taken away by pipeline or processed. Where offsite transport of gas is required, pipelines are the most appropriate method in order to minimise the need for vehicle movements and the associated impacts that may arise. As construction of pipelines can itself give rise to adverse impacts, it is important that the need for new infrastructure is minimised, and that routes for pipelines are selected which take full account of the need to minimise any impacts on the environment or local amenity.

5.124 Due the scale and nature of processing facilities and the sensitive locations in which they may sometimes be proposed, it is considered appropriate to share or co-locate facilities where this is feasible and viable, in order to minimise overall impacts. Where co-location is not proven to be practicable the priority should be for new facilities to be located on brownfield sites, industrial or employment land or, where necessary on land of lower agricultural quality.

5.125 The production of an oil or gas field can last up to 20 years, however it is important to ensure that applicants provide appropriate details, at the outset, indicating how the

site will be restored to an appropriate after use when operations cease in accordance with the requirements of Policy D10 Reclamation and afteruse.

Sustainability Appraisal

There are a range of mixed effects from this option, though it is more positive than negative. The preferred policy mostly acts as a positive safeguard against the main impacts of hydrocarbon extraction, particularly as it combines with preferred policy M16 and other policies such as the development control policies, though uncertainty is noted as these other policies are as yet unadopted.

There are, however, some negative effects. These stem largely from the fact that despite the strong protection in the policy combined with other plan policies, residual effects which are difficult to avoid or mitigate for will remain. For instance, historic environment, landscape character, biodiversity, community vitality, recreation and health and wellbeing were all objectives which reported this residual risk.

The climate change objective reported a mixture of positive and up to major negative effects. This is because the policy supports combined heat and power generation and prefers brownfield land at the same time as supporting hydrocarbon production and processing development. This development could cause release of fugitive methane, result in flaring, emissions of CO2 from traffic, or CO2 loss through the loss of soils and through the embodied energy of structures on site. A major conflict with the minimising resource use objective was also recorded as this policy will allow non-renewable resource extraction and may also have a considerable 'materials footprint'. However that same objective also recorded some positive effects as it seeks to make good use of land and existing infrastructure where available which would reduce the overall resource use.

Recommendations:
A potential approach to reducing resource intensity, waste and climate change impacts could be through better links to policy D11 'Sustainable Design, Construction and Operation of Development (which requires 'minimisation of waste generated by new minerals and waste development' and 'reduction or minimisation of greenhouse gases') by listing it in the 'key links to other relevant policies and objectives'.

Q04. Ref M18

Do you support the preferred policy approach? If not how should it be changed and why?

Carbon and Gas Storage

Policy M19: Carbon and gas storage

Proposals for carbon capture and storage and the underground storage of gas will be permitted where it has been demonstrated that:

i) The local geological circumstances are suitable; and
ii) There will be no harm to the quality and availability of ground and surface water resources, land stability and public health and safety;
iii) There would be no unacceptable impact on the environment or local amenity;
iv) The proposals are consistent with other relevant policies in the plan.

Transport of carbon or gas is expected to be via pipeline with the routing of lines selected to give rise to the least environmental or amenity impact.

Main responsibility for implementation of policy: NYCC , CYC, NYMNPA and Minerals industry	
Key links to other relevant policies and objectives	
M16, M17, M18, D06, D07, D09	*Objectives 9, 10, 11, 12*
Monitoring: Monitoring indicator 19 (see Appendix 3)	

Policy Justification

5.126 Carbon capture and storage is a technique which can be used for reducing carbon dioxide emissions into the atmosphere from sources such as fossil fuel power stations and Underground Coal Gasification. It involves capturing carbon dioxide, either before or after burning, transporting it in pipelines and permanently storing it deep underground in suitable geological formations. The Government believes Carbon Capture and Storage has potential to be an important technology in climate change mitigation. Potentially suitable geologies have been identified across the UK including areas within Ryedale and Scarborough which may be suitable for such processes. Proposals are under consideration (via the National Strategic Infrastructure Planning procedures) for the capture and storage of carbon from Drax power station, in North Yorkshire although the cancellation of the project has recently been announced. Whilst the proposals would involve construction of a carbon transport pipeline across part of the Plan area, carbon storage would take place within depleted gas fields under the North Sea. It is not expected that proposals for storage within the Plan area are likely within the Plan period. However, national policy requires Minerals Planning Authorities to encourage underground gas and carbon storage and associated infrastructure if local geological circumstances indicate its feasibility.

Sustainability Appraisal

This preferred policy has strong positive effects for the economy (in terms of energy security of gas storage and the business opportunities associated with CCS technology) as well as for climate change mitigation. Other effects tend to be location specific though could be negative due to factors such as the land footprint of buildings and pipelines and the risk that leaks could occur.

Recommendations:
No further mitigation proposed.

Q04. Ref M19

Do you support the preferred policy approach? If not how should it be changed and why?

Coal

5.127 Until 2004 substantial tonnages of coal were worked within the Selby Coalfield in North Yorkshire. However, with the closure of the coalfield in 2004, current workings are confined to seams accessible from Kellingley Colliery, one of the few remaining operational deep mines in the country, although it is now expected to close at the end of 2015. Whilst national energy policy seeks to encourage greater use of lower carbon sources of energy it indicates that coal is likely to play some role in supply for the time being and the mine is also a major employer and important contributor to the economy.

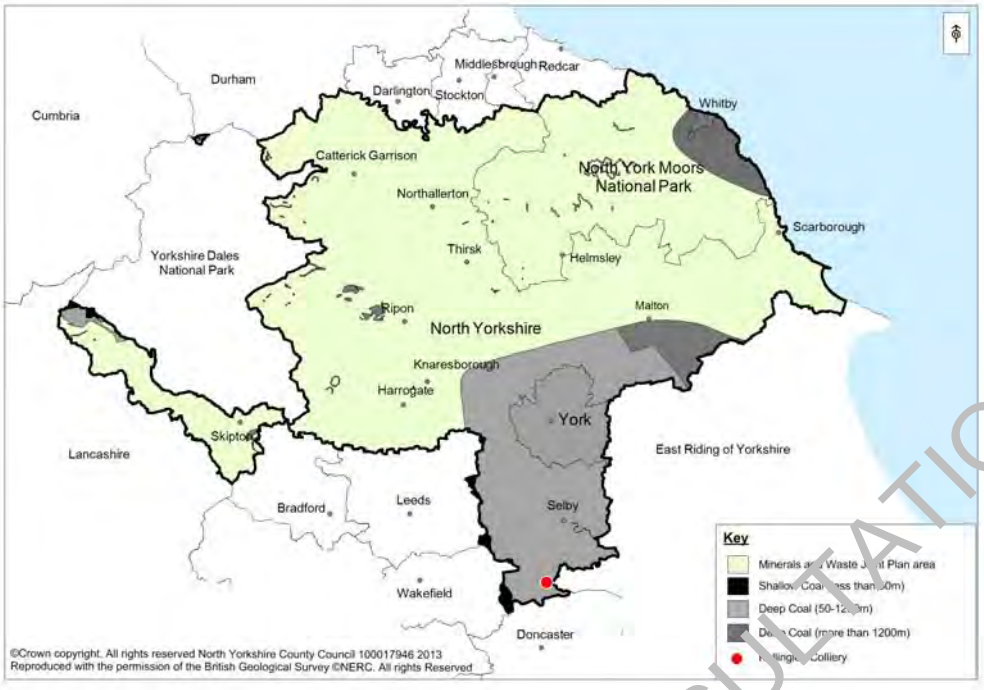


Figure 16: Coal resources in the Joint Plan area

5.128 The majority of the coal produced at Kellingley is sold to nearby power stations to which it is transported by rail from a rail head located at the colliery. Whilst it is understood that there are substantial reserves remaining, the mine operator has previously indicated that further resources to the north and north east may be accessible in the longer term subject to further permissions being granted. Development of these resources would be likely to require development of a new surface access site, which is not considered likely in the foreseeable future. Technical and operational reasons, for example localised geological conditions, may also lead to a need for the operator to seek the development of additional reserves, in the form of limited extensions to the existing permitted area, in the nearer term.

5.129 The intended closure of the Colliery means that it is now unlikely that proposals will come forward for additional working at the Colliery although it is considered important to continue to address this matter in the Plan to ensure flexibility should operations continue for longer than expected or the mine subsequently re-open.

5.130 Minerals resource information also suggests that limited and relatively fragmented resources of shallow coal are present in some parts of the Joint Plan area, but there has been no recent history, or any current known commercial interest, in the working of these by opencast mining methods.

Policy M20: Continuity of supply of deep coal

Proposals for lateral extensions to the permitted underground working area for Kellingley Colliery, in locations accessible from the current colliery site, will be supported where it can be demonstrated that the following criteria have been satisfactorily addressed;

i) the effects of subsidence upon land stability and important surface structures, infrastructure (including flood defences) and environmental and cultural designations, will be monitored and controlled so as to prevent unacceptable impacts;

ii) that opportunities have been explored, and will be delivered where practicable, to maximise the potential for reuse of any colliery spoil generated

by the development and that proposed arrangements for any necessary disposal of mining waste materials arising from the development are acceptable; **iii) the proposals would be consistent with the development management policies in the Plan.**
Main responsibility for implementation of policy: NYCC, CYC and NYMNPA, Minerals Industry
Key links to other relevant policies and objectives
M21, M22, I01, I02, S01, D13 | *Objective 5*
Monitoring: Monitoring indicator 20 (see Appendix 3)

Policy Justification

5.131 The intended closure of Kellingley Colliery at the end of 2015 suggests that it is unlikely that proposals for further working of coal resources from Kellingley Colliery will come forward. However, the potential for reactivation of working cannot be ruled out at this stage and it is therefore considered appropriate to support the principle of appropriate lateral extensions in the Plan. This approach could enable extraction of more viable areas of coal and therefore help provide support for the economy and other benefits that have been provided through former and current mining activity.

5.132 Underground mining of coal is often associated with surface subsidence which can have adverse impacts on certain structures and other infrastructure and assets. Whilst separate legislation exists to compensate landowners or undertake remediation for any damage caused, there may also be wider public interest considerations in ensuring a degree of protection. Features at risk can include large structures or those containing sensitive uses, assets and infrastructure such as roads and railway lines and flood defence works, as well as sensitive environmental and cultural designations such as nature conservation sites and listed buildings. Any proposals will need to ensure that unacceptable adverse impacts from subsidence will not arise.

5.133 Underground mining often generates large amounts of spoil which requires disposal. Spoil from Kellingley Colliery has been disposed of at offsite locations, principally the Womersley spoil disposal facility which is now nearly full. Transport and disposal of spoil can have significant environmental impacts. Any extended mine working would be likely to require new arrangements for disposal of spoil which would need to be acceptable in order for permission to be granted. Specific consideration of spoil disposal is contained in Policy M22: Disposal of colliery spoil. Spoil may also be capable of being used beneficially as a secondary aggregate and it will be important to maximise the potential for this, in line with Policy M11 relating to the supply of secondary and recycled aggregate.

Sustainability Appraisal

This preferred policy exhibits a mixture of mainly minor positive and negative effects. Most minor negative effects occur because, while the preferred policy combines with the development control policies in the plan, because of the nature of deep coal development, residual effects may remain. This is the case for flooding, health and wellbeing, landscape, historic environment, soils, traffic and water objectives. More significant minor effects occurred in relation to the resource use (as coal mining is the extraction of a non-renewable resource) and climate change (due to longer term greenhouse gas emissions from mines) objectives.

Positive contributions were also recorded, particularly in terms of the economy. However, all options recorded a high level of uncertainty as Kellingley Colliery is expected to close in

late 2015.

Recommendations:
To extend the capacity for colliery spoil to be put to productive use as secondary aggregate the policy could be strengthened by rewording the disposal arrangements sentence to *'the proposed arrangements for disposal of mining waste materials arising from the development are acceptable and opportunities for use as a secondary aggregate (or other productive use) have been explored'.*

Q04. Ref M20

Do you support the preferred policy approach? If not how should it be changed and why?

Policy M21: Shallow coal

Proposals for the extraction of shallow coal will be supported where extraction would take place as part of an agreed programme of development to avoid sterilisation of the resource as a result of the implementation of other permitted surface development; and where the proposal would be consistent with the development management policies in the Plan.

Other proposals for the working of shallow coal will be permitted where all the following criteria are met:

- **i) The site is located outside the National Park and AONBs and, where located outside these designated areas, would not cause significant adverse impact within them;**
- **ii) The site is located outside internationally and nationally important nature conservation designations and, where located outside these designated areas, would not cause significant adverse impact within them;**
- **iii) Where located in the Green Belt, the working, reclamation and afteruse of the site would be compatible with Green Belt objectives in line with national policy on Green Belt;**
- **iv) The site is well located in relation to the highway network and intended markets;**
- **v) The development would be consistent with the development management policies in the Plan.**

Main responsibility for implementation of policy: NYCC, CYC and NYMNPA, Minerals Industry

Key links to other relevant policies and objectives

M20, M22, S01, S06, D02, D03, D04, D05, D06, D07, D10	*Objectives 5, 9*

Monitoring: Monitoring indicator 21 (see Appendix 3)

Policy Justification

5.134 Shallow coal resources are relatively scarce across the Plan area and the resource is highly fragmented. There has been no recent history of working shallow coal and no known current commercial interest. Where the resource does occur, in some cases it is located in sensitive areas such as those designated as National Park, AONB or Green Belt. In a number of instances the resource is also found in locations relatively remote from major transport routes.

5.135 The nature of shallow coal extraction through opencast working can give rise to significant environmental impacts. It is therefore considered that specific criteria are necessary to ensure adequate protection of the environment and amenity should any proposals come forward, in addition to those requirements set out in the general development management policies elsewhere in the Plan.

5.136 In some instances it may be practicable to carry out prior extraction of shallow coal to avoid its sterilisation by other forms of surface development. This can be a particular opportunity for shallow coal as it is a relatively high value product and its working in relatively small quantities can be viable. Such prior extraction can be beneficial to avoid sterilisation of a valuable resource and can be in the overall interests of sustainable development, provided it can be carried out without unacceptable impact on environment and amenity. Where such prior extraction is proposed compliance with relevant environmental and amenity policies in the Plan will therefore be required.

Sustainability Appraisal

This preferred option mainly reports minor negative effects against the SA objectives that result from the potential for shallow coal to create large scale holes in the ground or generate impacts such as traffic, dust and water pollution. While development management policies elsewhere in the plan will help mitigate these impacts (though uncertainty is noted until these are finalised), the possibility that one or more large scale sites could result from the policy may leave some minor residual impacts.

Some objectives fare slightly worse with minor to major / moderate negative effects being reported under the landscape objective and climate change objective, and temporary major negative effects expected in terms of the land and soils and waste objectives.

Recommendations:
This policy is generally mitigated by other policies in the Plan (particularly relation to the water environment, local amenity and cumulative impacts, transport, agricultural land and soils, reclamation and after use and historic environment). However, the assessment has concluded that better links could be made to policy D10 'Reclamation and Afteruse' to ensure that all shallow coal development, inside and outside of the Green Belt is suitably restored (or suitable restoration / preparation for the development which would have otherwise sterilised the resource is enabled) Further mitigation might be achieved through restoration which helps to offset greenhouse gases – for instance restoration of habitats that sequester carbon or restoration to renewable energy production.

Q04. Ref M21

Do you support the preferred policy approach? If not how should it be changed and why?

Colliery Spoil

5.137 A major by-product of deep coal mining is colliery spoil. Colliery spoil can be re-used as secondary aggregate subject to market and other factors, and so be diverted from disposal, moving the management of colliery spoil up the waste hierarchy (see also Policy M11 relating to supply of secondary aggregate). Notwithstanding this, spoil from Kellingley Colliery is likely to require disposal for the remaining operational life of the colliery. The mine is now due to close at the end of 2015 and it is understood that spoil generated over its remaining life can be accommodated at the existing Womersley spoil disposal site. Previous proposals for additional capacity at that site

have now been withdrawn. It is expected that Policy M22 below will need to be revised prior to finalisation of the Plan.

Policy M22: Disposal of colliery spoil

Disposal of spoil from Kellingley Colliery at the Womersley spoil disposal site, including proposals for increased capacity required to provide for the expected remaining life of the Colliery to the end of 2015, will be supported subject to compliance with development management policies in the Plan.

Any additional spoil disposal capacity requiring development of new disposal facilities in the Joint Plan area will be considered in relation to the following order of preference:

- **i) Infilling of quarry voids where this can deliver an enhanced overall standard of quarry reclamation;**
- **ii) Use of derelict or degraded land;**
- **iii) Where use of agricultural land is necessary, use of lower quality agricultural land (ALC Grade 3b or below) in preference to higher quality agricultural land (ALC Grade 3a or higher).**

Preference will also be given to proposals which are located;

- **iv) Outside the Green Belt unless it can be demonstrated that the development at the particular location proposed would not represent inappropriate development, in line with national policy;**
- **v) Where spoil can be delivered to the site via sustainable (non-road) means of transport or, where road transport is necessary, transport of spoil can take place without unacceptable impacts on the environment or residential amenity.**

Proposals should also demonstrate compliance with other relevant development management policies in the Plan.

Main responsibility for implementation of policy: NYCC and Minerals industry	
Key links to other relevant policies and objectives	
M11, M20, M21, W01, W05, W10, I01, D02, D03, D05, D07, D09, D10, D11	*Objectives 2, 4, 6, 8*
Monitoring: Monitoring indicator 22 (see Appendix 3)	

Policy Justification

5.138 The expected closure of Kellingley Colliery at the end of 2015 means that it is no longer expected that substantial volumes of spoil requiring disposal will arise in the Plan area and it is expected that any remaining spoil up to that date can be accommodated at the existing Womersley spoil disposal site.

5.139 If additional disposal capacity is required to accommodate spoil over the remaining life of the Colliery, or to serve any reactivated mining activity, then it is considered that use of spoil to facilitate the reclamation of existing quarry voids is the most sustainable option in principle as this can help deliver additional benefits. Where this is not practicable, disposal on derelict or degraded land will be preferable to use of agricultural land, and where it is necessary to use agricultural land, preference should be given to land of lower quality. Such an approach is generally in line with national planning policy.

5.140 In order to ensure consistency with recent national policy for waste, it is also important to ensure that preference is given to locations outside the Green Belt, unless it can be demonstrated that the development would not be inappropriate in the specific location proposed.

5.141 Colliery spoil is a bulky material which can arise in large volumes. Transportation of spoil can therefore give rise to significant impacts on communities and on the environment, particularly when road haulage is involved. It is therefore important to give preference to proposals which utilise sustainable transport modes, such as rail, water or pipeline. Where road haulage is the only option it will need to be demonstrated that a suitable haulage route/s are available between the location of arisings and the point of disposal.

5.142 A range of other impacts may arise in the disposal of spoil and compliance with other relevant development management policies in the Plan will need to be demonstrated.

Sustainability Appraisal

Minor negative effects were observed for almost all sustainability objectives as most of the potentially major effects of colliery spoil disposal would be mitigated to a large degree by the development management policies. Effects may temporarily rise to major negative for the biodiversity and landscape objectives largely due to the potential loss of a SINC site at Womersley. For any new site there is, however, significant uncertainty on the magnitude of effects as this will depend on the location of the site in relation to population and other environmental receptors.

Objectives for minimising resource use and minimising waste observed mixed positive and negative effects as the policy is a disposal option for spoil and says little about re-use as secondary aggregate, though this is promoted by policy M11 which is linked. The climate change objective noted the potential for unknown greenhouse gas emissions at a new site, which depending largely on the distance from the source of colliery spoil. Some minor benefits for the recreation and wellbeing objectives may come through restoration in the long term.

Recommendations:
The policy could be strengthened by making a stronger link to policy D11 (which isn't listed in the policy's 'key links to other relevant policies and objectives') so that a carbon assessment for new sites would be required.

Q04. Ref M22

Do you support the preferred policy approach? If not how should it be changed and why?

Potash, Polyhalite and Salt

5.143 There are various forms of potassium bearing minerals which can be mined for potash including sylvinite, polyhalite and carnalite. Potash is mainly used as a fertiliser. Rock salt may occur in association with potash and is commonly used for de-icing roads. Both potash and salt occur at substantial depths below the eastern part of the plan area, where existing extraction takes place. Identified resources lie mainly beneath the North York Moors National Park.

Policy M23: Potash, polyhalite and salt supply

Proposals for the extraction of potash, salt or polyhalite from new sites within the North York Moors National Park or the provision of new surface development and infrastructure will be assessed against the criteria for major development set out in Policy D04.

Proposals for sub-surface lateral extensions to the permitted working area for Boulby Potash Mine and the Doves Nest Farm site(when permitted) in locations accessible from the existing site, proposals for extensions to the permitted operating period at permitted sites as well as proposals for new sites outside of the National Park, will be supported where it can be demonstrated that the following criteria have been satisfactorily addressed; **i) The proposals will reduce the impact on the special qualities of the National Park or where this is not possible include substantial mitigation measures to improve the special qualities of the Park;** **ii) The effects of subsidence upon land stability and important surface structures, infrastructure (including flood defences) and environmental and cultural designations, can be monitored and controlled so as to prevent unacceptable impacts;** **iii) The proposed arrangements for disposal of mining waste materials arising from the development are acceptable; and** **iv) The requirements of Policy I01 for transport and infrastructure have been fully considered; and** **v) The proposals would be consistent with other relevant development management policies in the Plan.**
Main responsibility for implementation of policy: NYCC, NYMNPA and Minerals industry
Key links to other relevant policies and objectives
I01, S01, S04, D01, D04, D07, D13 | *Objectives 3, 5, 6, 8, 10*
Monitoring: Monitoring indicator 23 (see Appendix 3)

Policy Justification

5.144 Potash is identified as a mineral of local and national importance in the NPPF, which requires policies to be included for its extraction. There is however no requirement within national policy to maintain a certain level of potash reserves. Potentially viable resources of potash are understood to lie mainly beneath the North York Moors National Park. Where proposals for new potash (including polyhalite) mining activities are located within the National Park they will need to be considered in accordance with the requirements of the major development test. For these reasons it is not considered appropriate to allocate proposed sites in the Minerals and Waste Joint Plan but to consider any new proposals against the policy requirements set out above.

5.145 The UK's only working potash mine is located at Boulby which is in the north eastern area of the North York Moors National Park. The mine has been producing potash since 1973, with mining currently occurring at depths of 800-1350m below ground with operations extending to 14km off-shore. In 2014 a planning application was submitted for a new mine in the National Park at Doves Nest Farm for the extraction of polyhalite. The proposal also includes a 37km tunnel which will be used to conveyor the material to a handling facility at Wilton on Teesside. The National Park Authority resolved in June 2015 to grant permission for the development, subject to completion of a legal agreement.

5.146 Rock salt is mined as a by-product of potash extraction at Boulby mine. The rock salt is transported by rail to Teesside from where it is either exported or transported to locations within the UK, with a small amount transported by road to local authorities for use on roads.

Sustainability Appraisal

Most SA objectives have negative effects resulting from application of the major development test, which significantly moderates effects, but may still allow some development in the National Parks and AONBs. Support for new development outside of designated landscapes (albeit subject to specific criteria and the development management policies) could lead to negative effects (with significant uncertainty) for most SA objectives. In addition, lateral extensions could lead to subsidence or could extend the time period in which Boulby and Dove Farm operate, with corresponding minor negative / uncertain sustainability effects.

The economic and community vitality SA objectives report a mixture of uncertain, strongly positive and minor negative effects. This is because significant jobs could be provided, but tourism may suffer, depending on location.

The climate change and resource use objectives show up to major negative effects, the former due to the factors such as possible transport of materials, loss of soils and habitat and the embodied carbon in infrastructure such as road connections, pipelines (if used) and buildings (with uncertainty noted about the configuration of future sites, and effects moderated to a degree by the sustainable design policy), the latter objective recognising a large scale extraction of a non-renewable resource (albeit a resource which has limited potential for substitution).

Minor to major negative effects are reported for the water quality SA objective, as the potash resource outside of the National Park includes a concentration of Source Protection Zones.

Recommendations:
No further mitigation is proposed.

Q04. Ref M23

Do you support the preferred policy approach? If not how should it be changed and why?

Gypsum

5.147 Gypsum is a product of the evaporation of seawater and is used mainly in the manufacturing of plaster, plasterboard and cement. It is possible that demand for gypsum will increase in line with future development and economic growth.

5.148 Gypsum is found close to the surface and may be present across significant parts of the Joint Plan area although it is not currently mined, with a former mine at Sherburn in Elmet closing in 1988 although the permission remains extant. The mine workings are now understood to be flooded.

5.149 Synthetic gypsum is produced at Drax and Eggborough power stations as a by-product of the process of flue gas desulphurisation. Moves towards greater use of lower carbon fuel for power generation may lead to reduction in output of synthetic gypsum in the longer term.

5.150 Gypsum is identified as a mineral of local and national importance in the National Planning Policy Framework, which requires policies to be included for its extraction.

Policy M24: Supply of gypsum	
The extraction of natural gypsum and the supply of desulphogypsum will be supported where the proposal complies with the development management policies in the Plan.	
Main responsibility for implementation of policy: NYCC, NYMNPA and Minerals industry	
Key links to other relevant policies and objectives	
S01	*Objective 5*
Monitoring: Monitoring indicator 24 (see Appendix 3)	

Policy Justification

5.151 The potential for gypsum deposits to dissolve in water means that their distribution is unpredictable and no specific information is available for the Plan area. No mining of natural gypsum has taken place in the Plan area since 1988, with the cessation of working at the former mine at Sherburn in Elmet. Permission for working at Sherburn in Elmet Mine remains extant, although the workings are now flooded. There has been no indication of any commercial interest in reactivating workings or the opening of new gypsum mines in the Plan area. BGS have indicated that gypsum and anhydrite bearing units occur at depth under the NYMNPA area and as a result gypsum is unlikely to have formed and anhydrite is not considered to be an economic resource. Whilst it is considered unlikely that proposals for further working will come forward during the plan period, provision of policy support for the principle of development of gypsum resources, subject to compliance with other relevant policies in the Plan, would be consistent with national policy objectives, including the presumption in favour of sustainable development.

5.152 Supply of synthetic gypsum (known as desulphogypsum) is consistent with objectives to preserve scarce natural resources and for the minimisation of waste. Where development associated with the supply of synthetic gypsum falls within the scope of the Plan then it is considered that support should be provided, subject to compliance with other relevant policies.

Sustainability Appraisal

The consideration of future gypsum and DSG proposals against the development control policies should have broadly minor positive effects as future development will need to take account of a range of environment and amenity criteria. It will also have more major positive effects on the economic growth and changing population needs objectives as gypsum supply will be more secure going forward as both gypsum and DSG are supported. This will underpin future development due to gypsum's importance as a construction material.

Two objectives reported mixed positive and negative effects. The 'minimising resource use' objective identified that support for gypsum would consume a primary natural resource on the one hand, but support for DSG would do the opposite in that it would save / offset consumption of primary gypsum. A similar effect was observed for the 'minimising waste objective' in that the policy might, though supporting gypsum, allow gypsum to be extracted at the expense of utilising waste DSG as a resource. However, The policy also supported DSG, so the market may play a role in optimising the balance between these two materials.

Recommendations:
No further mitigation is proposed.

Q04. Ref M24

Do you support the preferred policy approach? If not how should it be changed and why?

Vein Minerals

5.153 Vein minerals in the form of fluorspar, barytes and lead mineralisation occur in association with other minerals within parts of Craven District, Richmondshire District and Harrogate Borough, as part of the North Pennine Orefield.

5.154 Historic working has comprised a combination of both surface and underground mining and planning permissions still remain in the vicinity of Greenhow Hill and Cononley for fluorspar extraction, although these would have to be subject to a mineral review and a new set of planning conditions determined before working could take place, as these sites are currently classified as dormant.

Policy M25: Supply of vein minerals	
Proposals for the extraction of vein minerals, including proposals for the reactivation of dormant permissions, will be determined in accordance with the development management policies in the Plan, having particular regard where relevant to any impacts on: **i) important habitats and species;** **ii) protected landscapes;** **iii) heritage assets;** **iv) tourism assets**	
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC and Minerals industry	
Key links to other relevant policies and objectives	
S01, D01, D02, D04, D05, D06, D07, D08, D09, D11, D13	*Objectives 5, 9*
Monitoring: Monitoring indicator 25 (see Appendix 3)	

Policy Justification

5.155 National policy requires that mineral plans include policies for the extraction of mineral resources of local and national importance although, with the exception of fluorspar, vein minerals are not mentioned specifically.

5.156 A small amount of fluorspar, barytes and lead mineralisation occurs in association with other minerals, mainly Carboniferous limestone, within Harrogate Borough (to the west of Pateley Bridge) and Craven District (near Cononley, west of Skipton), as part of the North Pennine Orefield. The occurrences in the former area are located within the Nidderdale AONB and also lie within or in close proximity to areas designated as SPA and SAC.

5.157 There has been no known activity in terms of development of vein minerals for at least 15 years, although old dormant planning permissions still remain in the vicinity of both Greenhow Hill and Cononley for fluorspar extraction.

5.158 There is no evidence of any commercial interest in reactivation of workings or opening new workings in the Plan area, or any indication of any future requirements.

5.159 The significant environmental constraints that exist in the western part of Harrogate Borough, together with the absence of any apparent commercial interest in these deposits in the Plan area means that it would not be appropriate to support the principle of further working in the Plan. If any proposals do come forward then they would need to be assessed against the relevant development management policies. Proposals for working within the AONB may need to meet the major development test and there may also be need for Appropriate Assessment under the Habitats Regulations.

Sustainability Appraisal

This policy does not provide support for the extraction of vein minerals in the plan area however should development come forward and gain consent, a number of negative impacts could result particularly in relation to the environmental SA objectives. This is largely because vein minerals occur close to sensitive receptors (such as wildlife sites and designated landscapes) and extraction techniques can utilise a significant area of land and can be energy intensive. There may be positive economic benefits associated with this policy should new vein minerals development come forward and gain consent. An element of uncertainty is noted throughout the assessment as any proposal would be considered in line with the development control policies in the Plan which are not yet finalised. Recommendations: No further mitigation proposed.

Q04. Ref M25

Do you support the preferred policy approach? If not how should it be changed and why?

Borrow Pits

5.160 Borrow pits are mineral workings used to supply material solely in connection with a specific construction or engineering project. They are typically located on the site of, or immediately adjacent to, the project to avoid or substantially reduce traffic associated with importation of minerals on public roads. Sometimes the voids created are backfilled with surplus or unusable material from the project and the land restored under a much shorter timescale than for a conventional quarry. Often, they can be restored within the timescale of the associated construction works. In some circumstances, borrow pits can represent a sustainable form of development in that they help reduce transportation impacts compared with supply from other sources. They can also help prevent sterilisation of the resource, help ensure higher quality materials are not used for a lower grade use and also help reduce the need for new or expanded conventional quarries.

Policy M26: Borrow pits
Proposals for borrow pits where permission is required will be supported where the required mineral cannot practicably be supplied by secondary or recycled material of appropriate specification and from a source in close proximity to the construction project, and; where all the following criteria can be met: **i) The site lies on, or immediately adjoins, the proposed construction scheme so that mineral can be transported from the borrow pit to the point of use without significant use of the public highway system;** **ii) The site can be landscaped and appropriately restored within an agreed timescale and to an agreed end-use without the use of imported material other than that generated on the adjoining construction scheme;** **iii) The proposal meets all the relevant criteria set out in other relevant development management policies in the Plan.**
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC and Minerals industry
Key links to other relevant policies and objectives

M01, M03, M04, M05, M06, M08, M09, M10, M11, M13, S01, S02, D01, D02, D03, D06, D07, D09, D10, D11, D12	*Objectives 5, 7*
Monitoring: Monitoring indicator 26 (see Appendix 3)	

Policy Justification

5.161 Principles for the sustainable management of resources suggest that, where practicable, secondary or recycled materials should be used in preference to primary minerals. The possibility of sourcing secondary or recycled material should therefore be considered before proposals are brought forward for a borrow pit. Use of such materials (provided they can meet the necessary specification for the works) would only be likely to present a significant overall benefit compared with supply from a borrow pit if the secondary or recycled sources are located in relatively close proximity to the project, in order to avoid the need for road haulage over long distances. Where borrow pits are proposed information should be provided to demonstrate the relationship between the proposal and the specific project to be served. Borrow pits should not be used to serve the wider market for minerals and it is likely that any permissions granted will be limited on that basis.

5.162 The Town and Country Planning (General Permitted Development) (England) Order 2015 sets out where development is permitted without the requirement for a successful planning application. This includes the winning and working on land held or occupied with land used for the purposes of agriculture of any minerals reasonably necessary for agricultural purposes within the agricultural unit of which it forms part unless the site is within 25 metres from a metalled part of a trunk road or classified road. However this permitted development right does not include minerals that are moved to outside the land from which it was extracted and therefore, in these circumstances, proposals will be considered against the criteria set out in policy M26.

Sustainability Appraisal

This policy would have some positive impacts in terms of reducing transport miles, reducing climate change impacts and shortening supply chains resulting in positive economic effects and a positive contribution towards meeting the needs of a changing population. However, borrow pits would also have some negative effects, such as possible local effects on water quality, temporary generation of dust, loss of primary resources, and impacts on the historic environment, landscape or recreation. However, these effects are generally very short term and uncertain due to being dependent on location.

Recommendations:
The existing development management criteria are considered sufficient to mitigate negative effects to acceptable levels.

Q04. Ref M26

Do you support the preferred policy approach? If not how should it be changed and why?

Chapter 6: Provision of Waste Management Capacity and Infrastructure

Introduction

6.1 This chapter focusses on planning for the management of waste generated in the Joint Plan area. Waste is produced by a wide range of domestic, commercial and industrial activities, sometimes in large quantities. Commercial and Industrial waste, waste from the agricultural sector and waste from construction and demolition activity are the most common types of waste arising in the area. Substantial amounts known as Local Authority Collected Waste (LACW) is also collected (mainly from households), or delivered to Household Waste Recycling Centres and managed by local authorities in the Plan area.[16]

6.2 LACW arises widely across the Joint Plan area but, as household and some commercial waste is an important part of this waste stream, there is a strong association with the distribution of population, with the more urbanised parts of the Joint Plan area being key sources of arisings. It can comprise a wide range of items including inert waste and biodegradeable materials such as food waste, as well as waste which needs specialist management, such as waste electrical equipment.

6.3 Commercial and Industrial (C&I) waste is generated by business and industrial activity and therefore will occur relatively widely within the area, with a particular concentration in the more urbanised parts. C&I waste can include a very wide range of materials, due to the range of sources from which it is generated. Certain elements of the C&I waste stream, such as mixed ordinary C&I waste, can be very similar to household waste and can often be dealt with through similar processes. However, an important exception to this is the Power and Utilities sector, which comprises a large proportion of total C&I waste in the Plan area. The majority of this arises in the form of power station ash in association with electricity generation in Selby District.

6.4 Whilst there is limited data on where Construction, Demolition and Excavation (CD&E) waste arises, it is logical to assume that most arises in the more urban areas, or at other locations where large scale construction projects take place. It includes inert materials such as bricks and rubble, as well as non-inert material such as wood and plastic. A large amount of CD&E waste is disposed of or beneficially reused on the site where it arises and therefore does not enter the wider waste market and is not recorded. This position is expected to continue. In particular, overburden and waste stone generated during quarrying activity is generally disposed of as part of landscaping and quarry reclamation activity at the site where it is produced and does not enter the wider waste market.

6.5 The large majority of agricultural waste comprises organic materials, although other items such as plastic packaging may arise. Agricultural waste is generated widely

[16] The District and Borough Councils in North Yorkshire have responsibility to collect LACW arising within NYCC. North Yorkshire County Council has responsibility to ensure arrangements are in place to manage the waste which is collected. As a Unitary Council, the City of York Council fulfils both these responsibilities within its area. Redcar and Cleveland Borough Council are responsible for collecting and managing LACW in the part of the North York Moors National Park in that Borough.

across the area outside urban locations but is particularly associated with more intensively farmed areas outside the upland parts of the Plan area.

6.6 Hazardous waste is waste which requires specialised management because of the potential it has to cause harm to health or the environment. It can occur in association with a range of commercial, industrial and domestic activities and may include some common household items which are discarded. Low-Level Radioactive Waste (LLRW) from the non-nuclear industry arises in very small quantities, often in association with medical and research activities as well as some industrial processes. Waste water and sewage sludge is generated in association with domestic, commercial and industrial activity and therefore its overall distribution is likely to be similar to that of LACW and C&I waste.

6.7 The following Table presents estimates of arisings of the main waste streams in the North Yorkshire Sub-region for 2013 unless otherwise stated[17].

North Yorkshire Sub-region - Estimated Main Waste Arisings (tonnes)	
Commercial and industrial waste	758,000[18]
Power and utilities waste	Approximately 998,623 tonnes of power station ash deposited at Barlow and Gale Common ash disposal facilities
Construction, Demolition and Excavation Waste	384,664[19]
Local Authority Collected Waste	415,214*
Agricultural Waste	4,581,443[20]
Hazardous Waste	29,515[21]
Low-Level Radioactive Waste	Estimated at less than 100m^3
Waste water	No data available

Table 1: Estimated waste arisings in the North Yorkshire Sub-region[22]
*LACW data relates to 2013 and does not include waste arising in the Redcar and Cleveland area of the NYMNP

6.8 Alongside these estimates of waste arisings, information published by the Environment Agency (EA) suggests that a total of around 3 million tonnes (mt)[23] of waste was deposited at EA permitted waste management facilities[24] in the NY sub-region in 2013. There are also a range of import and export movements across the sub-regional boundary, mainly to and from West Yorkshire, the North East Region and the Hull and Humber area. Known exports of waste exceed known imports,

[17] For definitions of Sub-Region for each waste type, reference should be made to North Yorkshire Sub-Region Waste Arisings and Capacity Requirements – Interim Report and North Yorkshire Sub-Region Waste Arisings and Capacity Requirements – Final Report (Urban Vision and 4Resources, October 2013)
[18] Estimates for C&I waste in this Table are based on extrapolation from the North West C&I survey 2009 and are for 2015.
[19] Estimate for 2013 and comprises 101,000 tonnes C&D waste and 291,600 tonnes Excavation waste. These figures should be regarded as minimum estimates as other CD&E wastes only recorded as originating within Y&H are likely to have arisen within NY sub-region.
[20] 2011 estimate. A very large majority (estimated at 4,549,257t) of this is expected to be organic material dealt with on site through composting/land recovery/treatment with only 32,188 tonnes likely to require management off site
[21] 2013 arisings figure
[22] Urban Vision and 4Resources, Waste Arisings and Capacity Requirements Addendum Report (2015) and EA data
[23] 2013 WDI data. This figure excludes any waste deposited at sites exempt from permitting but includes approximately 1mt of waste deposited at restricted user landfill facilities. The large majority of this is expected to be waste ash from power stations.
[24] There are a substantial number of permit exempt sites in the area but information on waste deposited at these is not available.

although the actual volumes of known imports and exports are relatively small in comparison to total deposits and estimated arisings[25]. This suggests that the Plan area is already largely self-sufficient in managing its overall waste arisings, although it is known that there is variability in volumes of cross-boundary movements depending on commercial and other factors.

6.9 National Government policy aims to ensure that waste can be managed in more sustainable ways and this means moving away from traditional waste disposal practices like landfill, towards alternative means of managing waste as a resource, for example through recycling or recovery of other value, such as energy, from it. The Plan area has traditionally been heavily reliant on landfill to deal with waste, although in recent years significant progress has been made towards increasing the amount of waste dealt with by other means such as reuse, recycling or composting. The recycling and composting rate for household waste is now at around 46%[26], with local and national targets to achieve a level of 50% by 2020.

6.10 There is a need for the Plan to contribute to diversion of LACW away from landfill in accordance with national objectives and agreed targets in the York and North Yorkshire Municipal Waste Management Strategy[27]. The current rate of landfill for this waste stream is around 53% in the North Yorkshire area, with an agreed target of diverting a minimum of 75% from landfill. A new contract for the management of residual LACW has now been procured by NYCC and CYC, which will enable the landfill diversion target and the 50% recycling target to be met. Key to achieving this shift is the construction of a new facility in North Yorkshire (known as Allerton Waste Recovery Park) on which work has now commenced, with the facility expected to be commissioned in 2017.

6.11 There are also a range of other national targets supporting the more sustainable management of waste. These include achieving a target rate for recycling or recovery of 70% of Construction and Demolition waste by 2020 and reducing the amount of biodegradeable LACW sent to landfill to 35% of 1995 levels by the same date. More recently, Government has indicated an intention to move towards a 'zero waste economy' in which waste is viewed as a resource, with disposal only taking place where waste cannot be dealt with further up the waste hierarchy.

6.12 The Landfill Tax is a key factor in the need to divert waste from landfill. It aims to encourage waste producers to generate less waste and recover more value from it. Inert or inactive waste is subject to a lower rate of tax, currently £2.50 per tonne. The standard rate is currently (2015/16) £82.60 per tonne. This means that landfill is an expensive means of dealing with waste, as well as an option which is generally less preferable in environmental terms.

6.13 The Plan area already has a substantial range of waste management facilities including recycling facilities, landfill sites, treatment facilities and transfer stations and more facilities are either under construction or have received planning permission. Most of these are located within the NYCC and City of York areas and are generally located close to centres of population and areas of expected future growth. There are relatively few facilities in the North York Moors National Park and much of the

[25] E.g. Urban Vision and 4Resources, Waste Arisings and Capacity Requirements Addendum Report (2015)
[26] This figure relates to the recycling rate for the York and North Yorkshire Waste Partnership area and therefore does not include those parts of the North York Moors National Park and Yorkshire Dales National Park areas falling within Redcar and Cleveland Borough and Cumbria County Council respectively. The recycling rate for the Plan area itself is expected to be very similar
[27] The Joint Municipal Waste Management Strategy was produced by the York and North Yorkshire Waste Management Partnership in 2007 and sets out a range of local targets and objectives for managing this waste stream

waste generated in the Park (and also in the adjacent Yorkshire Dales National Park) is managed in the NYCC area or elsewhere.

6.14 To help with planning for waste in North Yorkshire the three planning authorities involved in preparation of the Joint Plan, together with the adjacent Yorkshire Dales National Park Authority, commissioned consultants to look in more detail at future waste management capacity needs over the period up to 2030. The findings of this sub-regional study[28] are available at www.northyorks.gov.uk/mwevidence. A key objective of this work was to examine potential future needs in the light of information about the current situation, in order to identify any important capacity 'gaps' for which provision should be made in the Plan. The findings of the project have informed the content of this Preferred Options consultation.

6.15 The main role that the three Waste Planning Authorities can play in promoting the more sustainable management of waste is to support the provision of any additional capacity that is likely to be required in the area in order to meet future waste management needs in a sustainable way. This can be achieved by establishing a supportive local planning policy framework which encourages development of any new waste facilities which may be needed, in appropriate locations, whilst ensuring a high level of protection for our environment and communities.

6.16 Supporting the provision of facilities needed to manage waste more sustainably will also help support delivery of agreed targets for waste management, such as those adopted by NYCC and the CYC in their roles as Waste Collection and/or Disposal Authorities. However, the wide range of parties involved in the management of waste, the rapidly evolving policy and regulatory climate, as well as continuing advances in technologies, suggest that there will also need to be a degree of flexibility in any local planning policy. This will help ensure that the waste management industry can come forward with proposals which help deliver one of the Government's overall objectives for waste planning of providing the right facilities, in the right place, at the right time.

Moving waste up the waste hierarchy

6.17 The 'waste hierarchy' is a well-established policy tool supporting the more sustainable management of waste. Moving waste management practice up the waste hierarchy is a key objective of Government policy[29] and needs to be reflected in the approach taken in local plans for waste. Minimisation of waste, re-use and then recycling represent the three highest levels of the hierarchy (see Figure 3 in Chapter 2).

6.18 Achieving the management of waste further up the hierarchy will involve the actions of a wide range of organisations and individuals, including the public, businesses, the waste management industry and waste management and planning authorities. The Plan is limited in its ability to influence generation of waste (although this is addressed where practicable in Policy D11 in Chapter 9 relating to sustainable design). It can play a role in moving waste up the hierarchy by encouraging and supporting development proposals which enable waste to be dealt with at higher levels of the hierarchy than is currently the case and by imposing a degree of restraint on other forms of development, such as landfill and incineration without energy recovery (which, as disposal options, represent the lowest level of the hierarchy), unless there is appropriate justification. Locational policies for waste can

[28] North Yorkshire Sub-Region Waste Arisings and Capacity Requirements – Final Report and Addendum Report (Urban Vision and 4Resources, October 2013 and 2015)
[29] E.g. National Planning Policy for Waste (DCLG 2014)

also play a role in helping move waste up the hierarchy through encouraging the co-location of complimentary waste activities. This is addressed later in policy W11 dealing with waste site identification principles.

Policy W01 - Moving waste up the waste hierarchy	
Proposals which help move management of waste up the waste hierarchy will be supported, with priority given to the delivery of development which would contribute to the minimisation of waste, the increased re-use and/or recycling of waste and to the delivery of waste treatment capacity which would contribute to the diversion of waste from landfill. **Further capacity for the large scale recovery of energy from waste will only be supported in line with Policy W04 and where any heat generated can be utilised as a source of low carbon energy or, where use of heat is not practicable, the efficient use of electrical energy can be achieved.** **The provision of new capacity for the landfill of biodegradeable residual waste will only be supported where it can be demonstrated that it is the only practicable option and sufficient permitted capacity within or in close proximity to the Plan area is not available. Proposals for the extension of time, where necessary at existing permitted biodegradeable landfill sites with remaining void space, will be supported in principle in order to facilitate provision of adequate capacity for disposal of residual waste in line with identified needs, or in order to achieve the satisfactory restoration of the site.** **Landfill of inert waste will only be supported where it would facilitate a high standard of quarry reclamation in accordance with agreed reclamation objectives, or the substantial improvement of derelict or degraded land where it can be demonstrated that the import of the waste is essential to bring the land back into beneficial use and the scale of the importation would not undermine the potential to manage waste further up the hierarchy.**	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry	
Key links to other relevant policies and objectives	
W03, W04, W05, W06, W07, W08, W09, W11, S03, D01, D05, D10	*Objective 1*
Monitoring: Monitoring indicator 27 (see Appendix 3)	

Policy Justification

6.19 Waste minimisation, reuse and recycling represent the top levels of the hierarchy and are the preferred means of dealing with waste. These are generally the most efficient means of extracting value from waste as a resource. For some types of waste, reuse or recycling is not practicable. For these, other forms of treatment are likely to be required in order to minimise the amount of waste disposed of via landfill, which is at the bottom of the waste hierarchy. Treatment can include a wide range of processes and technologies which, in various ways, can extract additional value from waste, thus helping to turn it into a resource.

6.20 Waste which it is not practicable to deal with further up the hierarchy may also be capable of being used as a resource via the recovery of energy through various forms of thermal treatment processes, including incineration. Where recovery of energy is proposed, national policy encourages utilisation of heat generated, potentially in association with other power, in order to help ensure the most efficient use of the waste as a resource. The investment required to deliver utilisation of heat

in association with recovery of energy from waste suggests that it is most likely to take place in association with relatively large schemes where economies of scale are likely to arise. There is significant permitted (but not yet operational) capacity for energy recovery in the Plan area. Any further proposals, consistent with other waste policies in the Joint Plan and with a capacity in excess of 75,000tpa, should be accompanied by information to demonstrate that the potential for heat utilisation has been considered and will be delivered where practicable. The Environment Agency has indicated that EfW schemes within 15km of large users of heat are more likely to have potential for heat utilisation. Where use of heat is not practicable, it is appropriate to support the maximum use of any electrical energy that can be generated, in order to help ensure the efficient use of waste as a resource.

6.21 Landfill represents the bottom of the hierarchy, although it is likely to still be required for waste which cannot be dealt with by other means, and may be able to play an important role in the reclamation of mineral workings in the Plan area. Achievement of a high standard of reclamation, potentially including importation of suitable materials, is addressed in Policy D10 Reclamation and afteruse. Evidence suggests that, subject where necessary to the extension of time for completion of landfilling at existing biodegradeable landfill sites with time limited permissions in the area, and depending on progress with implementation of permitted energy recovery capacity, there should be adequate capacity for biodegradeable landfill. It therefore follows that, in line with the waste hierarchy, it would not be appropriate to support the development of new biodegradeable landfill capacity in the Plan area unless there is clear justification in terms of any unmet needs and it is not practicable to utilise other suitable capacity outside the area.

6.22 Whilst diversion of inert waste from landfill can facilitate its beneficial use as a resource, inert landfill is less harmful to the environment as it does not decompose to generate greenhouse gasses to the same extent as biodegradeable waste. It can also play an important role in improving the standard of reclamation of quarries in the Plan area as well as, in some cases, the improvement of derelict or degraded land. It is therefore appropriate in some circumstances to provide policy support in principle for this method of waste management.

Sustainability Appraisal

This policy would encourage sustainable resource management by prioritising the management of waste as high up the waste hierarchy as possible. This results in particularly positive effects in relation to resource consumption, soils, climate change, minimising waste generation and managing waste as high up the waste hierarchy as practicable, the economy and meeting the needs of a changing population. Uncertain effects or effects which have both positive and negative aspects have been recorded against several of the other environmental and social objectives as the scale of impacts would be determined by the nature and location of the particular waste management facility. One area where minor negative effects could occur on balance is in relation to water demand, as some recycling operations can be water intensive.

Recommendations:
No mitigation is proposed as locational/development management issues will be dealt with under other policies in the Plan.

Q04. Ref W01

Do you support the preferred policy approach? If not how should it be changed and why?

Strategic role of the Plan area in the management of waste

6.23 A particular consideration is the role the Plan area plays in the management of waste over the wider North Yorkshire sub-region (i.e. the Plan area together with the adjacent Yorkshire Dales National Park (YDNP) which is a separate waste planning authority area).

6.24 There are currently no significant waste management facilities in the YDNP and national policy constraints suggest that this position is unlikely to change. NYCC, as Waste Disposal Authority, has a responsibility for the management of LACW collected from the majority of the YDNP [30] and this waste is currently dealt with mainly within the NYCC area. It is likely that this arrangement will need to continue over the plan period and to be reflected in any waste management capacity required in the Plan area. This approach has been acknowledged in the waste arisings and capacity evidence project undertaken by the four Authorities. Waste generated in the Redcar and Cleveland part of the North York Moors National Park has been allowed for in the Tees Valley Minerals and Waste Core Strategy (adopted in 2011). Draft memoranda of understanding with the YDNPA and Redcar and Cleveland Borough Council have been agreed to reflect these principles.

6.25 A view also needs to be taken on the extent to which the Plan area can or should seek to be self-sufficient in capacity to manage waste arising in the area, or whether greater reliance on exports to facilities elsewhere should be planned for. Evidence suggests that, in terms of overall waste volumes, the area exhibits a relatively high degree of self-sufficiency in capacity. However, information also indicates that there are a number of particular aspects in which the area is more reliant on capacity elsewhere. This includes treatment and landfill of hazardous waste, management of some LLRW, and; final reprocessing capacity for C&I and LACW[31].

6.26 Evidence, for example through Environment Agency permitting information and information supplied by the Waste Disposal Authorities in the area, also indicates that exports of some Household, Industrial and Commercial waste for treatment and landfill occurs but this only represents a relatively small proportion of total arisings.

6.27 Environment Agency data indicates that in 2013 the North Yorkshire Sub-region imported a minimum of 193,000 tonnes of waste. However, the actual figure is likely to be higher due to the lack of detail on the origin of some waste arisings. The majority of the waste known to be imported in recent years arose within West Yorkshire, with approximately 66,000 tonnes being received from Leeds. In the same year the Sub-region exported 334,000 tonnes of waste, over half of which was managed at sites within the Yorkshire & Humber region, i.e. in West Yorkshire, Hull and Humber area and South Yorkshire, with the Leeds and East Riding WPA areas being the largest individual export destinations. Areas to the north, particularly Redcar & Cleveland, Stockton on Tees and Hartlepool also received waste. However, data suggests that there are significant annual variations in the scale of movements between areas.

6.28 More recent information indicates that a range of LACW waste types are managed solely or partly outside of the Joint Plan area. Examples include materials or items such as: asbestos, automotive and household batteries, glass, paper, wood, chemicals, ferrous and non-ferrous metal, textiles, engine and cooking oil and cooling

[30] i.e. the area excluding that part of the YDNP located within Cumbria

[31] Initial separation and sorting of materials for recycling takes place within the Plan area, for example, in association with the operation of waste transfer activities, and at HWRCs. However, it is likely that a substantial amount of final reprocessing of materials to be recycled takes place outside the Plan area.

appliances. These are transported to a range of adjoining authorities for management including the Council areas of Leeds, Bradford, County Durham, Darlington, Middlesbrough and Hartlepool, the East Riding and Doncaster, as well as some more distant locations including Sunderland, Preston, Bury, Salford, Sheffield, West Midlands, Lincolnshire, Cambridgeshire and Norfolk.

6.29 The range of other WPA areas that LACW from the Plan area is currently transported to demonstrates the complexity of the waste management market that exists. Such complexity is likely to continue to exist over the Plan period.

6.30 Approximately 88% of hazardous waste arising within the Joint Plan area in 2013 was ultimately managed outside the Joint Plan area, with around 11% of the total arisings exported to Stockton on Tees to be managed, with Wakefield also taking a significant proportion. In the same year relatively small amounts of hazardous waste were imported into the Plan area from a range of other WPAs, including Leeds, and Wakefield.

6.31 Government policy[32] encourages communities to take responsibility for their waste arisings and to deal with waste in proximity to where it arises, as this is often the most sustainable arrangement, for example in terms of reducing traffic movements. However, there is no specific requirement in national policy for an area to be self-sufficient in capacity to manage its own waste and policy acknowledges that management of waste outside the administrative boundary of the area may be the most appropriate solution, for example where it would minimise the overall transport of waste or help use existing infrastructure effectively[33].

6.32 In some cases self-sufficiency is unlikely to be practicable, particularly for waste requiring specialist facilities and/or for waste which only arises in very small quantities. This is very likely to be the case within the Plan area for facilities for the treatment and landfill of hazardous waste and LLRW for example. Markets for final reprocessing of recyclate are geographically varied and extensive and may include overseas destinations and this position is unlikely to change significantly as a result of market and economy of scale factors. The Joint Plan is unlikely to be able to influence this position significantly.

Policy W02 - Strategic role of the Plan area in the management of waste

Support will be given to proposals for additional waste management capacity needed to achieve an increase in net self-sufficiency in the management of waste to a level equivalent to expected arisings in the Plan area by the end of the plan period.

Where it is not practicable to provide specific capacity in the Plan area, including capacity for the landfilling of hazardous waste and the management of low level (non-nuclear) radioactive waste, as well as for other specialist provision which can only be met on a wider geographical basis, including reprocessing capacity for LACW and C&I waste, capacity requirements will be met principally through exports from the Plan area.

Provision of capacity within the Plan area shall include provision for waste arising in the Yorkshire Dales National Park, with the exception of mining and quarrying waste and small scale waste arisings which can be appropriately managed at facilities

[32] E.g. National Planning Policy for Waste (DCLG 2014)
[33] A further consideration is the requirement, contained in the EU Waste Framework Directive, for waste to be disposed of and, in the case of recovery of mixed municipal waste, recovered in the nearest appropriate installation

within the National Park.	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry	
Key links to other relevant policies and objectives	
W01, W03, W04, W05, W06, W07, W08, W09, W10, W11, I01, S03, D01, D04, D05	*Objectives 2, 4, 6, 7*
Monitoring: Monitoring indicator 28 (see Appendix 3)	

Policy Justification

6.33 National policy supports the principle of managing waste in proximity to where it arises and encourages community responsibility in the management of waste. At the same time it needs to be acknowledged that commercial considerations and operation of the market play a fundamental role in determining the actual pattern of movement of waste for management, and in most cases administrative boundaries have little influence on this. Evidence gathered during preparation of the Plan indicates that cross-boundary movements, both imports and exports, have taken place in recent years and it is expected that such movements will continue in response to market and other factors outside the control of the planning authorities.

6.34 Planning for a 'net self-sufficiency' approach can help balance these factors through, where practicable, the making of provision for waste management capacity at a level equivalent to expected future arisings in the area. This can help ensure that additional capacity can be delivered within the Plan area over the period to 2030 to achieve the local management of waste, whilst acknowledging that a degree of import and export movements are likely to continue, with exports from the Plan area in effect being balanced by flexibility for the area to receive an element of imports from elsewhere. Such an approach also reflects the fact that, for certain specialist waste streams, such as hazardous waste for landfill and LLRW requiring management at specialist facilities, both of which only arise in very small quantities in the Plan area, it is unlikely to be practicable to deliver specific capacity in the area. Similar considerations apply to re-processing capacity for many types of recyclate, which are often exported to nationally or regionally significant facilities receiving waste from a wide range of sources and for which specific provision in the Plan area may not be realistic.

6.35 As part of the evidence base for the Plan, a review of the current or emerging approach to self-sufficiency in waste management capacity within waste planning authority areas adjoining the Plan area, as well as for those which have recently exported significant amounts of waste to the area, has been undertaken. This suggests that all these areas are, or are intending to, plan on the basis of net self-sufficiency (or equivalent) for their area. This in turn indicates that it is unlikely that a significantly increased level of imports into the Plan area will occur in the future, as other areas plan for more capacity to meet their own equivalent arisings. Further evidence work indicates that areas currently receiving exports from the Plan area do not envisage significant problems in such movements continuing to occur over the foreseeable future, suggesting that an approach of net self-sufficiency for the Plan area is likely to be adequate and appropriate in meeting future waste management needs.

6.36 A specific consideration for the Joint Plan authorities is the relationship between the Plan area and the adjacent Yorkshire Dales National Park. Local Authority Collected Waste arising in the YDNP (with the exception of the part of the Park falling within Cumbria) is collected by North Yorkshire Waste Collection Authorities and managed by NYCC as the Waste Disposal Authority and a distinction is not drawn by the WCAs or WDA between waste arising inside or outside the YDNP area. It is

therefore managed alongside waste arising in the Joint Plan area and this position is expected to continue over the plan period. The waste capacity needs study undertaken as part of the evidence base for the Joint Plan was prepared in partnership with the YDNP and reflected capacity requirements for waste arising in the YDNP within the study. These are in turn reflected in the approach to future capacity requirements in the Joint Plan. Nevertheless, it is likely to be practicable for some waste arising in the YDNP to be managed in the Park and it is expected that where appropriate this will be addressed in the new Local Plan for the YDNP. A memorandum of understanding between the Joint Plan authorities and the YDNP has been drafted to reflect this agreed position.

Sustainability Appraisal

This policy would have positive effects in the Plan Area in terms of reducing transport miles and associated emissions and in supporting the economy and jobs, however it is likely to have negative effects on most of the environment and community SA objectives. This is because it may require additional facilities to ensure that waste capacity is equivalent to total arisings with the additional impacts that these would bring. In terms of providing capacity within the plan area to deal with waste arising in the Yorkshire Dales National Park this would largely maintain the status quo in terms of how waste is managed from the National Park, and this would have mainly neutral effects on the Plan Area and modest benefits for the Yorkshire Dales as it will allow the special qualities of the National Park to be maintained.

Recommendations:
No further mitigation is proposed.

Q04. Ref W02

Do you support the preferred policy approach? If not how should it be changed and why?

Meeting future waste management needs

6.37 To help with planning for waste it is necessary to make some assumptions about the scale of future arisings that may need to be dealt with and the waste management capacity expected to be available over the Plan period. As mentioned earlier, work on this has been commissioned to support preparation of the Plan. This work provides a useful benchmark but the position with regard to future capacity needs is complicated by a number of factors including:

- The scale of future arisings may be influenced by a wide range of matters such as the economy, technological changes and changes in behaviour of waste producers and these cannot be predicted with any certainty
- Waste management policy and practice has been going through a period of rapid change in recent years and this may continue
- There are significant limitations in availability of data relating to current arisings and management of some waste streams (the main exceptions being LACW and hazardous waste)
- Data on waste management capacity is not comprehensive and is subject to change over short time periods, for example as new permissions are granted or expire.

6.38 Together, these and other factors mean that it is not practicable to plan for future waste management capacity with a high degree of precision, suggesting that it will be necessary to include a degree of flexibility in the Plan.

6.39 The work commissioned by the Authorities uses two sets of scenarios, one about possible changes in amounts of waste arising over the Plan period and the other about how waste management practice may change over the same time, and compares these against available information on waste management capacity in the area. This can be used to give an indication of the potential scale of any 'capacity gap' between potential requirements and current capacity.

6.40 The main focus of the work has been on waste streams other than LACW, particularly C&I and CD&E wastes. The York and North Yorkshire Waste Partnership have utilised available data to provide a forecast projection of Local Authority Municipal Solid Waste[34] for the Joint Plan area up to and beyond the plan period. The current projections predict an increase of over 99,000 tonnes in arisings over the period from 2015/16 to 2039/40. Over the period to 2029/30 (i.e. around the end date for the Plan) the projected increase is about 70,000 tonnes[35]. Provision has largely been made to manage this projected increase in LACW arisings over the plan period.

6.41 A new contract for managing residual LACW in the NY sub-region has recently been procured and work has commenced on construction of a new waste recovery facility, known as the Allerton Waste Recovery Park, (AWRP) which would enable delivery of targets agreed under the current Municipal Waste Management Strategy for York and North Yorkshire[36]. It is therefore not proposed to review the approach to dealing with residual LACW as part of preparation of the Minerals and Waste Joint Plan. The proposed AWRP facility has been designed to accommodate expected growth in arisings of residual LACW over the period to 2040.

6.42 Since work on arisings and capacity evidence was first commissioned by the Authorities, potential scenarios have been updated in an Addendum Report (2015). This is to help ensure that the modelling work takes into account more up to date information and to reflect responses received on the original scenarios during consultation at Issues and Options stage. The updated scenarios[37] are;

Scenarios relating to growth:

Waste Stream	Growth	Minimised Growth	Comment
LACW	Varies between +0.8% and +2.9% per annum	As for Growth scenario	Reflects modelling work already undertaken by the York and North Yorkshire Waste Partnership
Commercial	0% per annum	-1% per annum 2015 to 2021 then 0% per annum to 2030	Growth scenario assumes that growth from increasing business activity would be offset by waste reduction initiatives. Minimised Growth scenario assumes that impact of reduction initiatives reduces over time as there is little scope for further change

[34] Municipal Solid Waste is a key element of LACW
[35] York and North Yorkshire Waste Partnership Data, further information provided in the NYCC Waste Evidence Paper (2015)
[36] The AWRP facility will include a range of processes including mechanical treatment, anaerobic digestion, energy from waste recovery and incinerator bottom ash recycling
[37] The scenarios summarised here are taken from the North Yorkshire Sub-region Waste Arisings and Capacity Addendum Report (Urban Vision, 2015)

Industrial	0% per annum	-1% per annum	Growth scenario assumptions as per commercial waste. Minimised Growth assumes impact of continued rebalancing of the sub-regional economy away from manufacturing etc. towards service sector
CD&E	+1% per annum 2015-2021 then +0.5% per annum to 2030	0% per annum	Growth scenario assumes higher rate of growth as sub-regional economy recovers from recession but that rate of growth will not be sustained in the longer term Minimised Growth scenario assumes any growth pressures are balanced by minimisation initiatives

Table 2: Growth scenarios

Scenarios relating to waste management practice:

6.43 These involve making broad assumptions about how waste could be managed in future, such as through increased recycling and recovery of energy, to help move waste management further up the waste hierarchy. Under all scenarios it is assumed that management of residual LACW will be through the AWRP facility (which would enable achievement of an overall rate of diversion from landfill of over 95%, including a household waste recycling rate in excess of 50%) and it is therefore not shown in the Table below.

Waste Stream	Maximised Recycling	Median Recycling	Comment
C&I	10% non-recyclable waste to landfill by 2020 75% recycling of the remainder by 2020 with 85% recycled by 2030; balance to energy recovery	10% non-recyclable waste to landfill by 2020 65% recycling of the remainder by 2020 with no further improvement thereafter; 35% to energy recovery by 2030;	Current estimate for C&I recycling rate for NY sub-region is between 55% and 58%
CD&E	75% recycling by 2020 with no further improvement thereafter	60% recycling by 2020 with no further improvement thereafter	Current estimate for CD&E recycling rate for NY sub-region is 39% although likely to be substantially greater than this for the construction and demolition element of the CD&E stream

Table 3: Waste management practice scenarios

6.44 The evidence-based scenarios referred to above can, when considered in relation to current estimated waste management capacity, be used to generate higher and lower estimates of the scale of any potential waste management 'capacity gaps' that may occur over the period to 2030. This in turn can help with making assumptions about the scale of any new provision we need to plan for.

6.45 The following table summarises the potential capacity gaps identified for the key waste management capacity types. Taking into account the scenarios presented in Tables 2 and 3 above, the capacity gaps presented below are based on the following assumptions:

1) Local Authority Collected Waste is managed in accordance with growth assumptions developed by the York and North Yorkshire Municipal Waste Partnership and measures already implemented or being implemented, including the Allerton Waste Recovery Park facility (currently under construction).

2) Waste growth reflects the 'Growth' scenario assumptions identified in Table 2 above. This is to help ensure that a worst case assumption in terms of future waste volumes is planned for and to reduce the risk of any under-provision in the Plan.

3) Recycling capacity requirements are based on the 'Maximised Recycling' scenarios, with landfill capacity requirements based on the 'Median Recycling' scenarios. This is to help ensure that improved recycling performance is not restricted through lack of provision in the Plan, whilst adequate provision for landfill capacity is made in the event that recycling rates do not reach the levels envisaged under the maximised recycling scenarios during the plan period. It also helps provide more flexibility in the overall provision that is made.

4) Energy recovery capacity at recently permitted but not yet operational sites in the Plan area comes on stream to meet additional requirements for energy recovery for C&I waste.

5) Extensions of time are sought and permitted for a continuation of landfilling at existing landfill sites in the Plan area for non-inert non-hazardous waste but which are currently subject of time limited permissions expiring during the plan period.

6.46 It should also be noted that the capacity gap figures presented in Table 4 below are based on an assumption that all waste is managed in the Plan area, in accordance with the principle of net self-sufficiency in capacity for the management of waste. In practice it is likely that some waste will continue to be exported in accordance with current or future market circumstances. As a result of this approach and the assumptions used about recycling and landfill rates (as summarised in paragraph 6.45 above) the figures presented in Table 4 are considered to represent a 'worst case' scenario in terms of the scale of additional provision that may be required.

Waste capacity type and stream	Estimated maximum annual capacity gap 2020 (tonnes)	Estimated maximum annual capacity gap 2025 (tonnes)	Estimated maximum annual capacity gap 2030 (tonnes)
Recycling (C&I and LACW)	nil	nil	26,423
Recycling (CD&E)	249,119	277,177	287,680
Landfill (CD&E)	nil	100,327	117,717
Landfill (hazardous)	8,683	8,946	9,217

Table 4: Main capacity gaps

6.47 Based on available information and the assumptions set out in paragraphs 6.45 and 6.46, no overall capacity gaps are identified for landfill of C&I waste and LACW, energy recovery, composting or transfer, although as indicated later in this chapter,

provision of further capacity for these forms of waste management may be justified in certain circumstances, including in order to provide an appropriate overall geographical network of facilities.

6.48 The information above has been used to help develop policies to ensure that adequate provision is made for management of the various waste streams arising in the Joint Plan area. These are presented in the following sections. With regard to LACW the information below is also supplemented by information provided by the North Yorkshire and York Waste Disposal Authorities.

Q06) Do you agree with the assumptions made about expected future waste growth, practice and capacity gaps presented above? If not what alternative approach would you suggest?

Local Authority Collected Waste (LACW)

6.49 Local Authority Collected Waste (LACW) includes waste collected from households and a range of other waste from municipal sources, as well as commercial and industrial waste of similar composition collected by or on behalf of local authorities.

6.50 Substantial progress has been made in recent years in achieving the more sustainable management of LACW. When the new AWRP facility is commissioned (expected in 2017) this will help deliver a step change in diversion of residual LACW from landfill, as well as a further increase in the rate of recycling of this waste stream.

6.51 Notwithstanding this, other new or improved infrastructure is expected to be required during the plan period to help move management of LACW up the waste hierarchy and deliver more local solutions for its management.

Policy W03 - Meeting waste management capacity requirements - Local Authority Collected Waste

Net self-sufficiency in capacity for management of Local Authority Collected Waste will be maximised through:

1) **Identification of the Allerton Park (WJP08) and Harewood Whin (WJP11) sites as strategic allocations over the plan period for the management of LACW. Where necessary, proposals to extend the time period for continued waste management operations at these sites over the plan period and the development of other appropriate waste management infrastructure will be supported in principle subject, in the case of the Harewood Whin site, to consistency with relevant national and local Green Belt policy.**

2) **Delivery of additional transfer station capacity for LACW to serve the needs of Selby District through the allocation of a site at Common Lane, Burn (WJP16). Proposals for development of transfer capacity for LACW at this site or at an alternative location consistent with Polices W10 and W11 will be supported in principle.**

3) **Subject to compliance with Policies W10 and W11 and the development management policies in the Plan, supporting in principle proposals for:**

   a. **increased capacity for the recycling, reprocessing and composting of**

LACW where this would reduce reliance on export of waste from the Plan area for recycling or reprocessing; **b. Improvements to the Household Waste Recycling Centre network.** **LACW will be exported for management where sufficient capacity cannot be provided within the area.**
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry
Key links to other relevant policies and objectives
W01, W02, W10, W11, S03, D01, D05 | *Objectives 1, 2, 6, 7*
Monitoring: Monitoring indicator 29 (see Appendix 3)

Policy Justification

6.52 Substantial progress has been made in recent years in reducing the amount of Local Authority Collected Waste that is landfilled, with a corresponding increase in recycling, composting and other forms of treatment.

6.53 Local Authority Collected Waste is dealt with at a range of existing facilities in the Plan area and substantial capacity for its management is already in place. Following commissioning of the AWRP facility in 2017 capacity will be sufficient for management of residual LACW in order to secure diversion from landfill of over 95% for this waste stream, and a recycling rate for household waste of over 50%. This would enable national and local targets for recycling and landfill diversion to be met. As well as providing a strategically important location for recycling and recovery, the wider Allerton park site (adjacent to the AWRP facility) contains a significant proportion of the remaining permitted capacity for biodegradeable landfill in the Plan area, capable of receiving LACW and other waste which cannot be diverted from landfill. Therefore the overall Allerton Park complex is likely to remain a strategically important location for the management of LACW and other similar waste during the plan period and it is appropriate to identify and protect it in the Plan as a strategic location. The landfill operation is subject of a permission which is due to expire in 2018 and support in principle for an extension of time for this permission is provided in Policy W03.

6.54 Similarly the Harewood Whin site, near York, plays an important strategic role in management of LACW via a range of processes and contains the majority of remaining operational biodegradeable landfill capacity in the Plan area alongside the Allerton Park site. It is also subject of temporary permissions which are likely to need renewing during the plan period and it is considered appropriate to identify and protect it in the Plan as a strategic location, with support in principle for continued operations. As this site is located in the Green Belt, any further development would need to be consistent with relevant Green Belt policy.

6.55 Whilst extensive new infrastructure requirements for management of LACW during the Plan period are not expected (subject to commissioning of the AWRP facility), it is expected that further transfer station capacity will be needed to serve Selby District. A site for this at Burn Airfield has been submitted in response to earlier consultation and is allocated in the Plan. It is also considered appropriate to support the principle of development of other capacity and/or improvements to the network of facilities for management of LACW where this could help increase the extent to which the area is self-sufficient in capacity and move waste up the hierarchy, in line with the strategic approach, or in other respects result in a more efficient overall network. In all cases where further development is involved, it will be necessary for proposals to be

consistent with other relevant policies in the Plan, including Policies W10 and W11 establishing locational principles and site identification criteria for new waste facilities.

6.56 A number of potential allocations have been put forward for sites which would be expected to manage a combination of LACW and C&I waste, due to the similarity between these streams and the ways in which they need to be managed. It is proposed to allocate a number of these in the Plan and they have been identified in the following Policy W04 dealing with C&I waste, although their expected dual role should be noted in the context of Policy W03[38].

Sustainability Appraisal

For this policy Allerton Park (WJP08), Harewood Whin (WJP11) and Common Lane Burn (WJP16) have been assessed separately as part of the site assessment process as they each have quite different sustainability impacts.

Supporting additional proposals for recycling, reprocessing and composting may also generate new facilities with potential environmental and community effects (though these effects will be reduced by policies W10 and W11 as well as the development management policies). Similarly, supporting improvements to the Household Waste Recycling network may result in new development. Again, the effects of this development are considered to potentially involve minor effects on the environment and community objectives that will be reduced by development management policies. The effects on the environmental and community objectives are considered to range from insignificant to minor negative.

This policy is likely to have strong benefits on the economy SA objective. It will generate jobs and promote low carbon resources from what previously would have been considered waste. It will also reduce the costs associated with alternative disposal in landfill. There are also strong benefits for the minimising resources and waste hierarchy SA objectives as this development is essential for reducing waste.

Recommendations:
Mitigation has been proposed in relation to Allerton Park (WJP08), Harewood Whin (WJP11) and Common Lane Burn (WJP16) in the Site Assessment Report.

Q04. Ref W03
Do you support the preferred policy approach? If not how should it be changed and why?

Commercial and Industrial (C&I) Waste

6.57 There is no predicted overall gap in transfer capacity for C&I waste over the Plan period although, as for LACW, provision of further transfer stations may be appropriate in order to provide an adequate overall geographical distribution of capacity, particularly taking into account the highly dispersed pattern of development in the area.

6.58 A small gap in recycling capacity for C&I waste (and LACW) may arise towards the end of the plan period. The 2013 report on waste capacity requirements notes that , as is the case for LACW, increased provision for bulk recyclate materials such as paper, card, glass, plastic and metals is likely to be met by capacity at regionally and nationally significant reprocessing facilities through economies of scale. It is

[38] Sites which are expected to play a role in management of both C&I and LACW include WJP08, WJP11, WJP13, WJP15, WJP16, WJP17, WJP18 and WJP19.

therefore expected that provision for final management of increased levels of recyclate generated within the area will in part be provided for by export to facilities outside the Plan area. There is no predicted gap in capacity for aerobic composting of C&I waste over the Plan period.

6.59 There is adequate predicted capacity for specialist recycling provision (Metal Recycling Sites, End of Life Vehicles and Waste Electronic and Electrical Equipment) although as with transfer capacity, further provision may be justified in order to provide an adequate geographic network.

6.60 Treatment includes a wide range of processes that may be required to deal with materials prior to recycling, energy recovery or final disposal. C&I waste includes an element of hazardous waste and information suggests that around 26,000 tonnes were exported from the area in 2013, mainly for recovery[39]. Evidence suggests that a surplus or gap in treatment provision can be strongly influenced by the local provision or absence of specialised treatment facilities which may only be viable at a regional or national scale. Anaerobic digestion capacity is an important element of treatment for dealing with organic waste which might otherwise be landfilled. Permission for a substantial anaerobic digestion facility at the former North Selby Mine site in the City of York was granted in 2014 but has not yet been implemented. The progress of this scheme will be important in determining the extent to which any further treatment capacity (in the form of anaerobic digestion) may be required.

6.61 The scale of any potential future requirements for energy recovery capacity for C&I waste is dependent mainly on implementation of the AWRP proposal (see above) which would provide some capacity for energy recovery from C&I waste over the Plan period, and implementation of other recent permissions for major energy recovery facilities in Selby District[40]. Subject to capacity at one or more of these recently permitted facilities coming on stream it is not expected that a capacity gap will arise in the area for recovery of energy from C&I waste.

6.62 For hazardous waste (including hazardous C&I waste) requiring landfill, there is a potential capacity requirement of around 9,000 tonnes per annum[41] and this would not justify specific provision in the Plan area, with reliance instead needed on export to facilities elsewhere. Hazardous landfill capacity exists outside but relatively near to the Plan area in the Tees Valley and on the south bank of the Humber.

Policy W04 - Meeting waste management capacity requirements - Commercial and Industrial waste (including hazardous C&I waste)

1) Capacity requirements for management of C&I waste will be provided through:

i) Supporting proposals which would deliver increased capacity for the recycling and/or reprocessing and the treatment of C&I waste, particularly where this would reduce reliance on export of waste from the Plan area;

ii) Supporting the delivery of additional transfer station capacity for C&I waste where it can be demonstrated that additional provision would contribute to the objective of dealing with waste in proximity to where it arises;

iii) Providing strategic scale capacity for recovery of energy from C&I waste through a combination of spare capacity within the Allerton Waste Recovery Park facility and, if developed, the Southmoor Energy Centre and former Arbre Power Station site and supporting in principle the delivery of additional

[39] Waste Arisings and Capacity Requirements Addendum Report (Urban Vision, 2015)
[40] i.e. the Southmoor Energy Centre and former Arbre Power Station sites
[41] Waste Arisings and Capacity Requirements Addendum Report (Urban Vision, 2015)

energy recovery capacity for suitable C&I waste, where the planning authority can be satisfied that the facility would be appropriately scaled to meet unmet needs for management of residual C&I waste arising in the area. Subject to construction of the permitted large scale treatment capacity at Southmoor Energy Recovery Centre and/or the former Arbre Power Station site, support will not be given to proposals for large scale energy recovery for C&I waste where the waste to be recovered would arise mainly outside the Plan area, unless it can be demonstrated that the facility would represent the nearest appropriate installation for the waste to be recovered.

2) Additional provision to help increase self-sufficiency in capacity for management of C&I waste is made through site allocations for:

Allocations for recycling, transfer and treatment of C&I waste:

Land at Hillcrest, Harmby (WJP01)
Land at Halton East, near Skipton (WJP13)
Land at Skibeden, near Skipton (WJP17)
Land at Allerton Park, near Knaresborough (WJP08)
Land at Seamer Carr, near Scarborough (WJP15)
Land at Common Lane, Burn (WJP16)
Land at Pollington (WJP22)
Land at Fairfield Road, Whitby (WJP19)
Land at Harewood Whin, Rufforth (WJP11)

Proposals for development of these sites will be supported subject to compliance with the development management policies in the Plan.

3) No site specific provision for additional landfill capacity for non-hazardous C&I waste is identified although provision of additional capacity for landfill of non-hazardous non-inert C&I waste, as well as for an extension of the time period for the utilisation of remaining void space at existing landfill sites subject of time limited permissions, will be supported in principle where it can be demonstrated that the waste to be landfilled cannot practicably be dealt with further up the waste hierarchy and that there is insufficient permitted capacity within the Plan area. Any further unmet requirements for landfill capacity which cannot be met within the Plan area will be met through export.

Capacity for hazardous C&I waste requiring landfill will be met through provision outside the Plan area.

Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry	
Key links to other relevant policies and objectives	
W01, W02, W10, S03, D01	*Objectives 1, 2, 6, 7*
Monitoring: Monitoring indicator 30 (see Appendix 3)	

Policy Justification

6.63 Substantial capacity for management of C&I waste arising in the area already exists and significant further capacity has the benefit of planning permission but has not yet been implemented. Nevertheless, evidence produced during preparation of the Plan suggests that a small gap in annual capacity for recycling of C&I waste (and LACW) of around 26,000 tonnes could arise towards the end of the plan period[42] and that the area is likely to be reliant on export of waste for final reprocessing capacity and for the treatment of hazardous waste in particular. Provision of support for additional capacity could help meet any potential capacity gap as identified in Table 4, reduce

[42] Waste Arisings and Capacity Requirements Addendum Report (Urban Vision, 2015)

reliance on exports and help contribute to the area being net self-sufficient in capacity for this waste stream, although it is likely that the specialised nature of some C&I waste will mean that continued reliance on exports for some waste will be required. Discussions with waste planning authorities receiving exports from the Plan area suggest that the potential exists for such exports to continue if necessary. Although there is adequate transfer capacity already in place in the Plan area, the provision of additional capacity could assist with managing waste in proximity to where it arises, as well as helping to minimise overall transport impacts associated with waste movements, including for those wastes which need to be exported for management outside the Plan area.

6.64 A number of proposed allocations for management of C&I waste have been put forward for consideration during preparation of the Plan. In some cases these are considered suitable for allocation and are identified and supported in the Policy. Applications for development of these sites for the proposed use will need to be considered against other relevant policies, including the development management policies in Chapter 9. Due to the similarity between some elements of the LACW and C&I waste streams, some sites currently play a role in managing both and this position is expected to continue. Sites proposed for allocation for C&I waste may therefore also provide capacity for an element of the LACW waste stream and vice versa. Whilst this helps provide a degree of flexibility in provision it also means that it is not possible to quantify the precise scale of capacity that could be provided for one stream in particular. However, it is considered that in combination the proposed allocations will provide adequate capacity to meet forecast requirements for management of C&I waste.

6.65 New anaerobic digestion capacity has recently been permitted at the North Selby Mine site. If developed, this facility would provide adequate capacity to meet expected requirements for relevant C&I wastes.

6.66 Subject to implementation of the additional energy recovery capacity in the Southmoor Energy Centre and/or former Arbre Power Station sites, it is not expected that there will be any shortfall in energy recovery capacity to meet any likely future needs over the plan period. These sites and the site at North Selby Mine are identified in the Plan as committed sites[43] and are proposed to be safeguarded under Policy S03. In these circumstances it is not considered appropriate to support the principle of further large scale energy recovery capacity for the area in order to meet needs arising within it. For the purposes of this policy it is considered appropriate to use a threshold of 75,000tpa as an indicator of large scale, in line with the threshold used to identify strategically significant facilities in the Waste Position Paper for Yorkshire and Humber[44]. However, it may be appropriate to support the principle of further large scale capacity where it can be demonstrated that the facility would represent the nearest appropriate installation for recovery of the waste, in line with relevant legislation, and the proposal is otherwise compliant with relevant policies in the Plan. Any such proposals will also be expected to provide for utilisation of heat in accordance with Policy W01.

6.67 It is unlikely that there will be a requirement for new capacity for landfill of C&I waste over the plan period, taking into account current capacity and expected increases in diversion from landfill over the plan period. However, this assumption is partly dependent on extensions of time being granted for continued landfilling at existing sites with time limited permissions, where necessary. It is appropriate to support this in principle in the Plan to meet the needs for disposal of waste which cannot be managed in other ways, as well as for new landfill capacity where there is

[43] i.e. they already have planning permission for the development for which they have been put forward.
[44] Yorkshire and Humber Waste Planning Authorities July 2014.

appropriate justification and subject to compliance with other relevant criteria in the Plan.

6.68 Notwithstanding this approach, there is some uncertainty about the potential for new landfill sites for biodegradeable waste to be developed, if necessary, within the Joint Plan area as a result of the impact of pollution control constraints. A number of existing sites in the area, with planning permission for biodegradeable landfill, have not received environmental permits from the Environment Agency as a result of pollution control concerns, particularly where landfill would take place within existing or former quarries where there is a risk that important groundwater resources could be affected. There is potential for such constraints to affect a substantial number of quarry voids in the Plan area, thus significantly limiting the scope for new biodegradeable landfill capacity in the area should it be required. It is however considered that any unforeseen requirements for landfill of C&I waste can be met, where necessary, by export from the area, taking into account the extent of existing permitted capacity for landfill elsewhere within Yorkshire and Humber and the adjacent Tees Valley area.

6.69 Landfill of hazardous C&I waste requires specialist facilities which are limited in occurrence nationally and which do not exist in the Plan area. The very small scale of arisings, in the area, of hazardous waste requiring landfill means that it will not be practicable for specific provision to be made in the area. Hazardous waste for landfill is currently exported to a range of destinations and contact with relevant waste planning authorities suggests that there is potential for such exports to continue where necessary.

6.70 Proposals for new capacity for management of C&I waste will also need to demonstrate compliance with other relevant policies in the Plan, including the development management policies in Chapter 9.

Sustainability Appraisal

This policy has both positive and negative effects in relation to many of the objectives. This is because it supports the management of waste higher up the waste hierarchy and away from landfill, which has benefits in terms of reducing the land take and amenity impacts of simply landfilling waste, though the facilities for waste management higher up the waste hierarchy will themselves have a land footprint or amenity impacts.

Some effects are outright positive, for instance strong positive effects were noted for the minimising resource use and minimising waste objectives. Other impacts were related to the transport of waste, for which there are benefits through reducing reliance on exporting waste for recycling and/or reprocessing (resulting in shorter journeys), while there are lesser negative effects associated with exporting hazardous waste. This results in mixed effects for the transport, air quality and climate change objectives.

Positive effects were noted for the economy objective (due to the greater local focus being more cost effective for industry and supporting local jobs) and the changing population objective (as there may be benefits such as increased energy security). Elsewhere in the assessment uncertainty was noted as effects were seen as highly dependent on location.

A potential effect was noted in relation to community vitality and health and wellbeing. This is because hazardous waste will be managed outside of the Plan Area, which will in effect mean that some small scale noise and traffic effects may be exported and also negative perceptions of any properties close to hazardous waste sites may endure. However, such disposal sites are often remote from community receptors so the effect is considered insignificant.

Recommendations:
Most negative effects are moderated by the development management policies. No further mitigation is proposed.

Q04. Ref W04

Do you support the preferred policy approach? If not how should it be changed and why?

Construction, Demolition and Excavation (CD&E) Waste

6.71 There is no overall gap in transfer capacity for CD&E waste. As with other waste streams additional provision may be justified in order to provide a suitable geographic network.

6.72 Evidence suggests that current recycling rates for C&D waste are already relatively high although there is a predicted shortfall in capacity for recycling (mainly of the construction and demolition element of CD&E waste) based on the high recycling and waste growth scenarios, with an estimated maximum gap of around 288,000 tonnes per annum by 2030[45].

6.73 Hazardous construction and demolition waste, such as asbestos and asbestos contaminated waste, is currently exported for landfill and this remains the only waste management option for this waste, with an estimated annual capacity requirement of around 6,000 tonnes per annum over the Plan period. As with other hazardous waste requiring landfill, it is not likely to be practical to provide this within the Plan area and information suggests that existing management routes are likely to remain available for such waste.

6.74 There is a potential capacity gap for landfill of non-hazardous C&D waste, from 2021 onwards, with a maximum annual gap of around 18,000 tonnes per annum by 2030 under the median recycling and waste growth scenarios. However, if rates of recycling nearer to that envisaged in the maximised recycling scenario are achieved then the requirement for capacity for landfill of non-hazardous C&D waste could reduce to around 16,000 tonnes per annum by 2030[46]. There may be more potential to use C&D waste as a resource to help further reduce the need for landfill (for example by using it as a resource in engineering projects) and this management route should also be supported for this waste stream.

Policy W05 - Meeting waste management capacity requirements - Construction, Demolition and Excavation waste (including hazardous CD&E waste)

1) Capacity requirements for management of CD&E waste will be provided through:

i) Supporting proposals which would deliver increased capacity for the recycling of CD&E waste;
ii) Supporting the delivery of additional transfer station capacity for CD&E waste where it can be demonstrated that additional provision would contribute to the objective of dealing with waste in proximity to where it arises;
iii) Supporting provision of additional landfill capacity for non-hazardous non-inert CD&E waste where it can be demonstrated that the waste to be landfilled

[45] Waste Arisings and Capacity Requirements Addendum Report (Urban Vision 2015)
[46] Waste Arisings and Capacity Requirements Addendum Report (Urban Vision, 2015). Figure quoted represents the position under the 'Growth' and 'Maximised recycling' scenarios

cannot practicably be dealt with further up the waste hierarchy and that there is insufficient capacity in permitted or allocated sites in the Plan area. Landfill of inert CD&E waste, including such waste arising outside the Plan area, will be supported where it would facilitate a high standard of quarry reclamation in accordance with agreed reclamation objectives, or the substantial improvement of derelict or degraded land to a condition where it can be returned to a beneficial use;

iv) Supporting the principle of an extension of the time period for the utilisation of remaining void space at existing CD&E landfill sites subject of time limited permissions;

v) Capacity for hazardous CD&E waste requiring landfill will be met through provision outside the Plan area.

2) Additional provision to help meet requirements and increase self-sufficiency in capacity for management of CD&E waste is made through site allocations for:

Allocations for recycling of CD&E waste:

Land at Potgate Quarry, North Stainley (WJP23)
Land at Allerton Park, near Knaresborough (WJP08)
Land at Darrington Quarry, Darrington (MJP27)
Land at Barnsdale Bar, Kirk Smeaton (MJP26)
Land at Went Edge Quarry, Kirk Smeaton (WJP10)
Land at Whitewall Quarry, Norton (MJP13)
Land at Duttons Farm, Upper Poppleton (WJP05)

Proposals for development of these sites will be supported subject to compliance with the development management policies in the Plan.

Allocations for landfill of inert CD&E waste:

Land at Brotherton Quarry, Burton Salmon (WJP21)
Land at Tancred Quarry, Scorton (WJP18)

Proposals for development of these sites will be supported subject to compliance with the development management policies in the Plan.

Allocations for landfill of inert CD&E waste:

Land at Duttons Farm, Upper Poppleton (WJP05
Land adjacent to former Escrick Brickworks, Escrick (WJP06)

Proposals for landfill at these sites will only be supported as a means of enabling reclamation of any mineral workings developed in connection with allocations MJP52 and MJP55 and subject to compliance with development management policies in the Plan.

Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry

Key links to other relevant policies and objectives

M22, W01, W02, W10, S03, D01, D07, D09, D10	*Objectives 1, 2, 4, 6, 7*

Monitoring: Monitoring indicator 31 (see Appendix 3)

Policy Justification

6.75 CD&E waste arises in significant quantities in the Plan area and future growth and development activity, particularly within the more urbanised parts, is likely to lead to substantial quantities continuing to arise over the plan period. There is high potential for some elements of this waste stream to be reused or recycled, sometimes at the point of arising, for example in association with demolition and re-development activity. Evidence suggests that reuse or recycling of suitable CD&E waste already takes place at a relatively high rate (estimated at c.64% for the Construction and Demolition element managed in the area[47]). In many cases such material does not enter the wider waste market. Management of CD&E waste in this way at the point of arising is usually the most sustainable option and often may take place without a specific need for grant of planning permission.

6.76 A need for additional capacity for management of CD&E waste has been identified in evidence work for the Plan. This includes a requirement for both additional recycling capacity and some additional landfill capacity (see Table 4). Sustainability principles suggest that such waste should only be landfilled where it is not practicable to manage it further up the waste hierarchy. Where landfill is required, there are a number of existing sites in the Plan area with permission for this activity. Consultation with the minerals industry suggests that there have been increasing difficulties in sourcing suitable wastes for quarry reclamation purposes, whilst ensuring a high standard of quarry reclamation remains an important objective of national planning policy and an objective of the Joint Plan. Should additional landfill capacity be required it is appropriate to direct this towards the reclamation of minerals workings, of which there are a substantial number in the Plan area. In some cases it may also be appropriate to use suitable inert waste to improve the quality of derelict or degraded land, to enable it to be brought back into beneficial use and such an approach is also in line with the proposed policy W01 relating to the waste hierarchy.

6.77 Hazardous CD&E waste requiring landfill as the only realistic management option arises only in small quantities in the Plan area. There is no hazardous landfill capacity in the area and the small volumes of such waste arising suggest that provision of capacity in the area in unlikely to be practicable. Such waste is currently exported and consultation with other relevant WPAs suggests that there is likely to be potential for such exports to continue over the plan period.

6.78 A number of proposed allocations for management of CD&E waste have been put forward for consideration during preparation of the Plan. Some of these are considered suitable for allocation and are identified and supported in the Policy. Applications for development of these sites for the proposed use will need to be considered against other relevant policies, including the development management policies in Chapter 9. The allocations identified should, if implemented, enable forecast requirements for recycling of CD&E waste to be met during the Plan period, although development of other (unallocated) capacity for management of CD&E waste, including landfill where necessary, is also supported in the Policy to help provide flexibility and support delivery of the objectives of the Plan.

Sustainability Appraisal

This policy has a range of mixed effects. Many SA objectives report both minor positive and negative effects because while new facilities may be built to support the policy (impacting on biodiversity and generating dust, noise, local traffic and carbon), utilising CD&E waste to

[47] Waste Arisings and Capacity requirements Addendum Report (Urban Vision 2015)

regenerate land or for quarry restoration will often restore degraded land, which, depending on the restoration proposed, could bring a range of sustainability benefits. The 'restoration' aspect of this policy is the key reason why a strong positive effect is noted for the soils and land SA objective.

In a similar way some objectives noted both a neutral effect and a positive effect, largely because policies elsewhere in the Plan would mitigate for any negative effects, but the positive effects of quarry restoration would still occur. This occurs with the historic environment and landscape objectives.

Other strong positives are noted for the minimising resources and minimising waste SA objectives, which identified that more recycling of CD&E waste would reduce demand for new materials to be extracted and also reduce demand for disposal of materials. This can add value to what was once a waste, bringing economic benefits.

A potential effect was noted in relation to community vitality and health and wellbeing. This is because hazardous CD&E waste will be managed outside of the Plan Area, which will in effect mean that some small scale noise and traffic effects may be exported and also negative perceptions of any properties close to hazardous waste sites may endure. However, such disposal sites are often remote from community receptors so the effect is considered insignificant.

Recommendations:
No further mitigation is proposed.

Q04. Ref W05

Do you support the preferred policy approach? If not how should it be changed and why?

Agricultural Waste

6.79 The Joint Plan area has extensive areas of agricultural land and the agricultural sector is an important part of the local economy. Evidence suggests that substantial amounts of agricultural waste arise and that much of this is dealt with at the site where it arises, typically by spreading on land. Whilst evidence suggests that overall capacity for management of agricultural waste is sufficient, there may be potential for some agricultural waste to be managed further up the waste hierarchy than is currently the case, including through processes such as anaerobic digestion, which is encouraged through the national Waste Management Plan.

Policy W06 - Managing agricultural waste

Proposals for the on-farm management of agricultural waste at the point of arising, including proposals for individual farm-scale anaerobic digestion, will be supported where the proposed development would help move waste up the waste hierarchy, is appropriately scaled in relation to the arisings requiring management and compliance with relevant development management policies in the Plan can be demonstrated.

Proposals scaled to provide capacity for the management of agricultural waste from more than one agricultural holding, including facilities for the anaerobic digestion of agricultural waste, will be supported where they would be consistent with the overall locational principles and site identification principles for waste development in Policies W10 and W11; would help move waste up the waste hierarchy, and; compliance with relevant development management policies in the Plan can be demonstrated.

Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry	
Key links to other relevant policies and objectives	
W01, W02, W04, W10, W11, S03, D01, D11	*Objectives 1, 2, 7*
Monitoring: Monitoring indicator 32 (see Appendix 3)	

Policy Justification

6.80 The Potential requirements for off-farm disposal of agricultural waste (estimated at around 32,000 tonnes per annum[48]) have been allowed for within provision for C&I waste in the figures presented earlier in this Chapter. The volumes are such that they are expected to be of low significance in the overall waste arisings for the area. The large majority of agricultural waste is expected to be dealt with on-site through direct disposal to land or via composting. There is however a range of specialist provision in the area, including specialist storage, processing and incineration plants for animals by-products. One method of disposing of farm wastes is through anaerobic digestion whereby organic waste can be used to create energy. The Government is encouraging, through its Anaerobic Digestion Strategy, further development of anaerobic digestion facilities. Whilst any proposals brought forward under this policy should be directed principally at the management of waste from the agricultural sector, it may be appropriate for limited amounts of suitable organic wastes from other sources to be managed provided this would be consistent with the overall objectives and requirements of the Policy.

6.81 It may be practicable for management of agricultural waste to take place at the scale of an individual farm holding, dependant on the scale and nature of the holding. In other cases it may be more practicable for some agricultural wastes to be dealt with at facilities which provide capacity for multiple holdings. Both approaches may be appropriate within the area and in order to provide flexibility both are supported in the policy subject to compliance with other relevant policies in the Plan, including Policy D11 relating to the sustainable design of development.

6.82 Some waste arising through agricultural activity is managed alongside other similar wastes arising within the wider commercial and industrial sector and requirements for off-farm disposal have been included within provision for commercial and industrial waste in line with the waste capacity gap analysis undertaken to support the Plan.

Sustainability Appraisal

For most objectives this option displays either positive effects or neutral effects. In particular the preferred policy performs very positively against the resource use and waste minimisation objectives, in part because it encourages lower resource use and moves waste up the waste hierarchy by supporting anaerobic digestion. It also performs well for the soils and land objective because of the benefits of utilising organic farm wastes in composts (which are routinely made on farms), or as biodigestate for improving the productivity of land. However, this same objective records some uncertainty that crops may be grown as a feedstock for an AD facility, which if this were to happen could negatively impact on land as it my displace food crops.

Other areas of uncertainty were recorded for several objectives as the policy relies on other policies in the plan being adopted in their current form. A negligible to minor negative effect was noted in relation to biodiversity due to the possible combined effect of land take and leachate from off and on farm facilities as well as localised nutrient loading of soils from on

[48] Waste Arisings and Capacity Requirements Final Report (Urban Vision and 4Resources October 2013)

farm facilities still being significant even after other policies mitigating policies are applied.

Recommendations:
It may be advantageous to slightly alter the policy to add wording akin to 'additional organic waste streams may be acceptable at agricultural anaerobic digestion facilities provided that they serve a local need and comply with the overall policy'. This would further enhance benefits, particularly to the land / soils objective.

Clear links in the supporting text to policy D11 on sustainable design would further lessen effects on biodiversity.

Q04. Ref W06

Do you support the preferred policy approach? If not how should it be changed and why?

Low-Level (Non-Nuclear) Radioactive Waste (LLRW)

6.83 There is relatively limited evidence on arisings of LLRW in the Plan area and the means by which it is managed. Available evidence suggests current arisings are very low and are expected to remain so. Nevertheless, national policy indicates that local plans for waste should address needs for management of this waste stream.

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Policy W07 – Managing low level (non-nuclear) radioactive waste	
Capacity requirements for management of Low Level Radioactive Waste arising in the Plan area will be met through a combination of export to facilities outside the area and, where practicable, the provision of capacity within the Plan area to meet needs for LLRW arising within it. Particular support will be given to proposals which would assist in moving management of LLRW up the waste hierarchy, with preference being given to the onsite management of waste at the point of arising where practicable. Proposals for management of LLRW within the Plan area will need to demonstrate compliance with relevant Development Management policies in the Plan.	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry	
Key links to other relevant policies and objectives	
M18, W01, W02, W10, W11, S03, D01, D07	*Objective 2*
Monitoring: Monitoring indicator 33 (see Appendix 3)	

Policy Justification

6.84 The amount of low level radioactive waste arising from non-nuclear sources (such as industry, research and medical services) in the area is very small (estimated at less than 100m^3), although specific data is not available. Management of LLRW is understood to take place through a combination of onsite disposal through incineration (e.g. within the Health Care sector), export for management elsewhere (particularly the Knostrop facility in Leeds) and co-disposal alongside other waste.

6.85 There is no specific capacity in the area for the landfill of LLRW, with the nearest landfill at Clifton Marsh in Lancashire, although it is not known if any waste from the area is deposited at that facility. A nationally significant repository for radioactive waste is located near Drigg in Cumbria, although there is no evidence to suggest that any waste from the Plan area is managed at that site. Given the very small volume

of LLRW which is thought to arise in the Plan area, specific provision within the area is unlikely to be viable and reliance on exports will be needed.

6.86 There is no specific information available on expected future trends in arisings of LLRW, although it is possible that growth in the scientific employment sector in York could lead to some increase in future. However, overall volumes are expected to remain very small. There is also potential for generation of Naturally Occurring Radioactive Materials if exploration, appraisal or development of shale gas takes place in the Plan area. Flowback fluids from hydraulic fracturing can constitute a significant source of NORM, depending on the local geology. There may be potential for such waste to be dealt with via onsite treatment of the water prior to reuse for further hydraulic fracturing or prior to reinjection.

6.87 National policy and strategy applies the principles of the waste hierarchy to LLRW (including NORM) and it is appropriate to support the principle of providing local capacity for management of this waste stream where practicable, whilst acknowledging that it may not be practicable to provide local facilities to deal with the very low volumes of current arisings. Ongoing reliance on export of some LLRW for management is therefore likely to be required. Evidence suggests that there is capacity available at the Knostrop facility in Leeds, which is also likely to represent the nearest appropriate installation for the disposal of some LLRW.

6.88 Proposals for development of capacity for LLRW within the Plan area will need to demonstrate consistency with other relevant policies in the Plan, including the development management policies in Chapter 9.

Sustainability Appraisal

Mostly the effects of this preferred policy are small scale as the volume of LLRW is expected to be low and most significant impacts would be regulated through the environmental permitting regime. There could however be small impacts associated with land take, the possibility of accidental spills, changes to character resulting from small built structures or low level changes in traffic levels as a result of this preferred policy. This leads to low level negative effects (with considerable uncertainty) on the biodiversity, water quality, soil, climate change, historic environment, and landscape objectives with mixed positive and negative effects on the transport objective. There are low level positive effects on the waste management and economy (longer term only) objectives. Elsewhere effects are either uncertain or no effects are observed. Recommendations: No further mitigation is proposed.

Q04. Ref W07

Do you support the preferred policy approach? If not how should it be changed and why?

Waste Water and Sewage Sludge

6.89 Waste water arises in association with residential, commercial and industrial development. Specific data on arisings or future management requirements is not available. In some circumstances permitted development rights exist which may allow provision of some additional capacity without the need for the separate grant of planning permission. Nevertheless, it is appropriate to include policy in the Plan for this waste stream, to provide a basis for decision making if proposals do come forward. There is also the potential for waste water to be generated through new

forms of development, including exploration, appraisal and production of shale gas and other unconventional hydrocarbon sources. Where such proposals come forward and involve an element of waste water treatment or disposal they will need to be considered against any relevant minerals and waste policies in the Plan, as well as in relation the development management Policies in Chapter 9.

Policy W08 - Managing waste water and sewage sludge
Proposals for the development of new infrastructure and increased capacity for the management of waste water and sewage sludge will be supported in line with requirements identified in asset management plans produced by waste water infrastructure providers active in the Plan area. Preference will be given to the expansion of existing infrastructure in appropriate locations rather than the development of new facilities. Where it is not practicable to provide required additional capacity at existing sites, support will be provided for the development of new sites for the management of waste water and sewage sludge in line with the Waste Site Identification Principles in Policy W11. In all cases compliance with relevant Development Management policies in the Plan will need to be demonstrated. **Co-location of Anaerobic Digestion capacity with waste water treatment infrastructure will be supported in principle where the Anaerobic Digestion capacity to be provided would utilise output from the associated treatment works, where it would be of a scale appropriate to the location of the host waste water treatment site and where compliance with the development management policies in the Plan can be demonstrated.**
Main responsibility for implementation of policy NYCC, CYC, NYMNPA and Waste Industry
Key links to other relevant policies and objectives
M18, W01, W02, W10, W11, S03, D01, D07 Objectives 1, 2, 6, 7
Monitoring: Monitoring indicator 34 (see Appendix 3)

Policy Justification

6.90 Provision of adequate capacity for treatment of waste water is necessary in order to ensure that plans for growth (such as housing and economic development) can be delivered. The asset management plans of the various waste water infrastructure providers in the Plan area provide an indication of potential future requirements but do not cover the timeframe of the Joint plan. Consultation with the infrastructure providers suggests that, whilst the majority of new investment in capacity is likely to be based around expansion of the existing facility network, there may be a need for development of new sites. Provision for some flexibility in the Plan for this is appropriate in order to ensure that adequate opportunities for development of capacity are available.

6.91 Some of the output from waste water treatment activity may be capable of being subject to further treatment through in-vessel anaerobic digestion processes and this could help move this waste further up the hierarchy through reducing landfilling and recovering energy. In some instances, particularly for larger scale WWTW, it may be appropriate to co-locate AD capacity at the site as this could help minimise the overall need for transport of waste. Where such development is proposed it will also be necessary to ensure that compliance with relevant development management policies in the Plan can be achieved.

Sustainability Appraisal

Mostly the sustainability effects of this preferred option are small scale and minor and may be positive or negative. For instance, minor negative effects are associated with the objectives for, air, adaptation to climate change, historic environment, landscape and flooding in part because the facilities supported by the policy have a physical land take, would be likely to be located close to water and through traffic, construction activities and bio-aerosols, would impact upon air. Some objectives (such as the biodiversity, land use, climate change and health and wellbeing objectives) displayed mixed positive and negative effects because while the processes that take place may intrinsically have negative effects associated with them, co-location with AD and expanding sites allows for new positive effects such as reduced additional land take or the offsetting of energy use to take place. For the health and wellbeing objective, waste water treatment is on the one hand seen as essential for health and wellbeing while on the other hand could have local amenity effects.

The preferred policy performs particularly strongly against the resource use and waste hierarchy objectives as co-locating AD facilities with waste water / sewage treatment facilities will help turn waste materials into economically valuable resources. Sewage / water treatment also underpins the further development of settlements so performs well against the changing population needs objective.

Recommendations:
Negative effects associated with this preferred policy have already largely been reduced by this policy. However, sequential testing for flooding will be required prior to allocation or planning approval. Flood plain compensatory storage may also be required.

Q04. Ref W08

Do you support the preferred policy approach? If not how should it be changed and why?

Power Station Ash

6.92 Ash is produced in large quantities as a result of power generation activity in Selby District and forms a major and distinctive element of overall arisings of waste in the Plan area. The requirements of the waste hierarchy and the need to encourage the sustainable supply of minerals indicate that it is preferable for this waste to be put to beneficial use where possible. An element of the power station ash waste stream is already used as secondary aggregate and policy support for increased such use is provided in policy dealing with Supply of Alternatives to Land Won Primary Aggregate (Policy M11). Colliery spoil disposal is addressed in more detail in the Minerals Chapter (Policy M22).

Policy W09 - Managing power station ash

Support will be given to proposals to increase the utilisation of power station ash as secondary aggregate or for other beneficial use, in line with the preferred policy M11 for the Supply of Alternatives to Land Won Primary Aggregate.

Where ash cannot be utilised for beneficial purposes, support will be given for the continued disposal of power station ash at the existing Gale Common, Barlow and Brotherton Ings ash disposal sites, which are identified and safeguarded in the Plan as strategic sites for the disposal of waste.

Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste

Industry	
Key links to other relevant policies and objectives	
M11, W01, W02, W10, S03	*Objectives 1, 2, 4, 6, 7*
Monitoring: Monitoring indicator 35 (see Appendix 3)	

Policy Justification

6.93 Although the evidence report on waste capacity requirements does not deal specifically with waste disposal needs associated with power generation in Selby District, which is dealt with at dedicated private facilities and does not 'compete' with other waste for capacity at facilities available to the market, this is an important waste stream in the area as it arises in large volumes. Ash from Drax power station is disposed of at the adjacent Barlow Ash disposal mound. There are current proposals for development of a new thermal generating station at Drax, fitted with carbon capture and storage technology. It is understood that ash from this facility, if developed, would also be disposed of at the Barlow ash disposal site. Remaining capacity at the disposal site is understood to be sufficient to last throughout the Plan period. Ash from Eggborough Power Station is disposed of at the nearby Gale Common site, which again is understood to have sufficient remaining capacity for the Plan period. A third power station, Ferrybridge, is located just outside the Plan area but ash from it is disposed of at the Gale Common facility and, in emergency situations, at the nearby Brotherton Ings site, part of which is within the Plan area[49]. Capacity at this latter facility is also understood to be sufficient.

6.94 The three main disposal sites represent strategically important waste management facilities in the Plan area and it is appropriate to identify them as such, and safeguard them to ensure their availability for the future and this is addressed under Policy S03 Waste Management Facility Safeguarding.

6.95 Whilst there has been recent investment in infrastructure to support increased utilisation of power station ash as secondary aggregate, it is expected that large volumes will continue to require disposal. Well established long term disposal arrangements are in place for each of the three main power stations in the Plan area and it is expected that these arrangements will need to continue over the life of the Plan.

Sustainability Appraisal

There are some minor negative effects on biodiversity, water, local air quality and the historic environment, as well as less certain minor negative effects on landscape, community vitality (for which there are also some positive effects associated with employment) and health and wellbeing associated with this option, arising out of localised problems such as dust generation, possible runoff / leachate and traffic. These may however be offset to a degree by positive environmental and social effects, particularly in relation to reduced land take, resulting from lower levels of primary minerals extraction should support for use of power station ash result in less demand / need for this.

There are some major positive effects associated with climate change, minimising the use of resources and minimising waste generation resulting from the potential for power station ash to reduce demand for primary aggregates, and minor positive effects associated with the economy and meeting the needs of the population.

[49] It was announced in May 2015 that Ferrybridge power station is expected to close in March 2016 and this will need to be kept under review as work on the draft Plan continues.

Recommendations:
It is considered that other development management policies in the Plan, combined with environmental permitting would deal with the issues relating to dust, water pollution and air quality that have been identified in this assessment. No further mitigation is proposed.

Q04. Ref W09

Do you support the preferred policy approach? If not how should it be changed and why?

Overall locational approach to provision of new waste management capacity

6.96 In deciding on an overall approach to provision of any new waste management capacity in the area a number of factors need to be considered including, in particular:

- The nature and distribution of waste arisings in the area.
- The nature and distribution of the existing network of facilities.
- Other important characteristics of the area, such as the location of settlements, major environmental designations and transport networks.
- National policy requirements relevant to locating waste facilities.

6.97 The existing network of facilities in the Plan area is widely distributed, but in general is more closely associated with the more developed parts of the area and main road transport links. There is a concentration of landfill facilities in Selby District (these are mainly associated with reclamation of Magnesian Limestone quarries). Remaining capacity for landfill of biodegradeable waste is now mainly concentrated at two sites, Allerton Park to the south of Boroughbridge, and Harewood Whin, to the west of York. Treatment, transfer and recycling capacity is relatively widely distributed and tends to be located in and around main population centres in the Plan area. These facilities provide employment and make a contribution to the local and wider economy and are an important element in the overall infrastructure of the area.

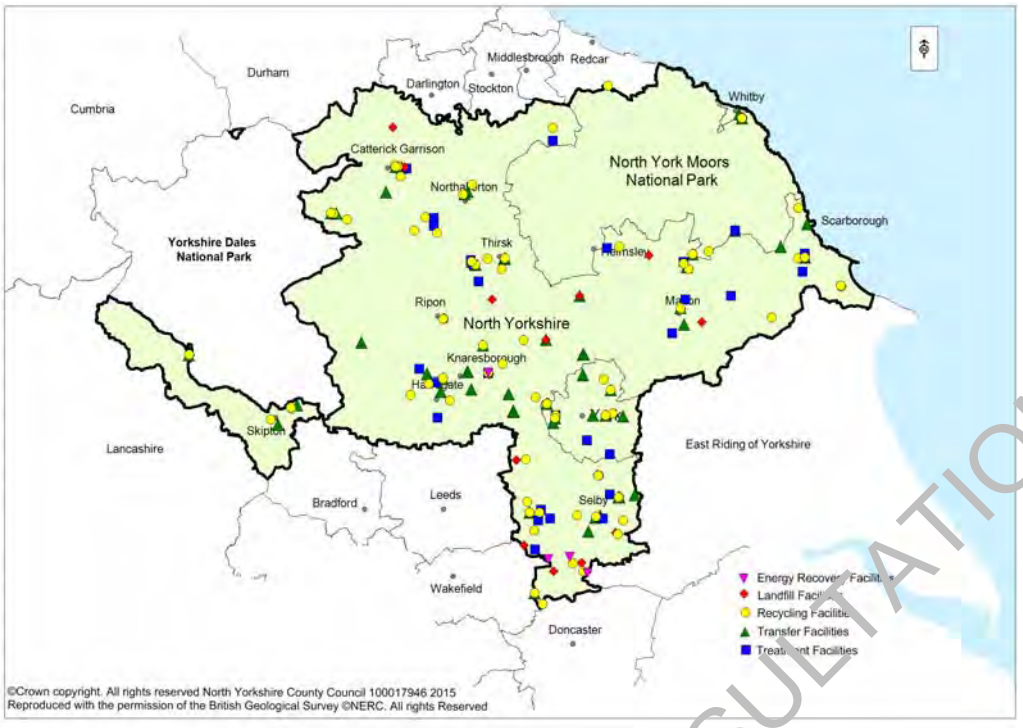

Figure 17: Permitted waste facilities in Joint Plan area

6.98 The Plan area is very large and highly rural, with a widely dispersed pattern of settlements. The City of York and the major towns of Harrogate and Scarborough represent the main population centres and a significant proportion of future growth in the Plan area is expected to be in and around these locations as well as other main settlements, as shown on the key diagram. Substantial parts of the Plan area are highly constrained by environmental designations, such as National Park and AONBs, as well as important nature conservation and historic environment designations which would be likely to preclude development of significant new waste facilities as a result of national policy constraints.[50]. A range of other constraints, such as Green Belt designation may also be relevant.

6.99 Access by road is good in some parts of the area, particularly in terms of north-south links through the central part, whereas east-west accessibility is less well developed and this is an issue which is likely to have some impact on the ease with which waste can be moved from locations of arising to locations where it can be managed. Modern waste management processes often involve a need for waste to be processed through more than one facility type. This can lead to additional movement of waste compared to the former situation where the majority of waste was transported directly from point of arising to its final point of disposal.

6.100 With the exception of agricultural waste and certain other specific waste types such as waste from the power generation industry, it is likely that a substantial majority of waste arising in the area is generated within or near to larger settlements, where most existing development is concentrated. As these locations are also expected to be the main focus for growth and associated development over the Plan period, it is likely that they will continue to be important sources of waste arisings over the plan period.

6.101 For some forms of waste management, and some waste streams, there is likely to be a need for a larger 'catchment' of waste arisings than others. For example, more

[50] Other important large scale constraints may also exist and are addressed in more detail in the Chapter 9 Development Management

complex recovery and treatment facilities tend to represent a higher level of investment and require larger catchments of waste to make them viable. Some wastes, such as hazardous waste, arise in small quantities that may mean provision of specialised facilities at a local level may not be viable. This is particularly likely to be the case in the Plan area which, as noted above, is largely rural.

Policy W10 - Overall locational principles for provision of new waste capacity

The main focus for provision of new waste management capacity required to meet identified needs will be within those parts of the Plan area outside the North York Moors National Park and the Areas of Outstanding Natural Beauty, unless the facility to be provided is appropriately scaled to meet waste management needs arising in the designated area and can be provided without causing unacceptable harm to the designated area.

Capacity requirements will be met through a combination of:

Maximisation of capacity within the existing facility network through granting permission for the continuation of activity at existing time limited sites with permission, the grant of permission for additional capacity within the footprint of existing sites and, the extension to the footprint of existing sites, subject to compliance with other relevant policies in the Plan;

Supporting proposals for development of waste management capacity at new sites where the site is compatible with other waste site identification criteria in the Plan (see Policy W11); and the site is located as close as practicable to the source/s of waste to be dealt with. This means:

a) For new smaller scale facilities serving district scale markets for waste, particularly LACW, C&I and CD&E waste, giving priority to locations which are within or near to main settlements in the area (identified on the key diagram) or, for facilities which are intended mainly to serve needs for small scale waste management capacity in more rural parts of the Plan area, including agricultural waste, where they are well located with regard to the geographical area the facility is expected to serve;

b) For larger scale or specialised facilities expected to play a wider strategic role (i.e. serving multi-district scale catchments), these will be located where overall transportation impacts would be minimised taking into account the market area expected to be served by the facility.

Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry

Key links to other relevant policies and objectives

W01, W02, W03, W04, W05, W06, W07, W08, W11, S03, D03, D04, D05	*Objectives 2, 6, 7, 8, 9, 10, 11*

Monitoring: Monitoring indicator 36 (see Appendix 3)

Policy Justification

6.102 Arisings of waste in the NYMNP and AONBs are likely to be low and these areas are also subject to constraints on major new development. As a result, it is not considered appropriate for them to host significant additional waste management

capacity, although small scale provision may be acceptable to meet local needs, particularly where this would assist in moving waste up the hierarchy.

6.103 There is already an extensive network of waste management infrastructure in the Plan area, representing a substantial amount of investment by both the private and public sectors. Sustainability principles suggest it will be appropriate to seek to maximise the effectiveness of the existing network in meeting future waste management needs. This can help secure current benefits to the local economy and the efficient use of existing land and infrastructure. In some cases existing sites are subject to time limited permissions which may expire during the plan period. It is considered appropriate to support the principle of extending the time limit for undertaking waste management operations at such sites in order to help secure their availability over the plan period. In some cases it may also be practicable for additional waste management capacity to be provided within the footprint of existing sites, for example through investment in additional processing plant and machinery. Where such development requires planning permission, it will also be appropriate to support it in principle. Where additional capacity can be provided through extending the footprint of existing sites this may also be a suitable means of enhancing the efficiency of the current network and, subject to compliance with other relevant policies in the Plan, is supported in principle.

6.104 National planning policy encourages management of waste in proximity to where it arises, as well as encouraging communities to take responsibility for the waste arising in their area. This suggests that, where practicable, new sites for waste management should be well located in relation to sources of arisings to be dealt with. Although detailed information on the geographical distribution of arisings of waste is not available, it is likely that most LACW, C&I and CD&E waste arises in the more developed parts of the Plan area and these are areas where further growth is likely to be focussed. It is therefore appropriate to seek to ensure that new development to deal with such arisings is located within or in close proximity to the main settlements in the Plan area. For waste more closely associated with rural activities (principally agricultural waste) it will be preferable for these to be located within the catchment areas they are intended to serve, in order to help reduce overall transportation impacts. For some types of waste management development outside urban areas, Green Belt designation may be a significant constraint and reference should be made to Policy D05 Minerals and waste development in the Green Belt (see Chapter 9) for further information on this matter.

6.105 Certain facilities can play a wider strategic role in the management of waste, as a result of their large scale or specialised role, or combination of the two factors. This means that they are likely to serve geographically extensive catchments of waste (for example significantly above the scale likely to be needed to serve a particular settlement, cluster of settlements or district) and it is therefore particularly important that such facilities are well located in relation to the overall catchment area to be served, as well as in relation to the transport network that is to be used to transport waste to/from the facility.

6.106 In all cases proposals for new capacity will need to demonstrate compliance with other relevant policies in the Plan, including the site identification principles in Policy W11 and the development management policies in Chapter 9.

Sustainability Appraisal

This preferred policy has mostly positive effects when compared to the SA objectives. This is largely because it maximises and builds on the use of facilities that are already there (which is generally a good thing to do in sustainability terms), and also seeks to reduce the

transport footprint of new facilities while linking the policy strongly to the waste site identification principals and other policies in the plan.

Amongst the most notable sustainability effects were strong positive contributions to the 'reduce resource use' and 'minimise waste' objectives (as less building will be needed to deliver the policy, and the policy underpins a wider strategy in this Plan to move waste up the waste hierarchy). In addition, the policy has strong economic effects as it retains jobs and potentially reduces business costs. The policy would also protect the special qualities of protected landscapes as well as the tourist jobs that depend on them.

Mixed positive and negative effects were recorded for the changing population objective as there is a minor concern that waste management in designated landscapes will become more difficult in the future.

Recommendations:
No further mitigation is proposed.

Q04. Ref W10

Do you support the preferred policy approach? If not how should it be changed and why?

Site identification principles for new waste management capacity

6.107 Alongside policy for overall locational principles for waste facilities, set out above, it is necessary to consider the approach to the specific types of sites that should be considered suitable in principle for waste management uses. This can provide a basis to help identify suitable site allocations, as well as help with decisions on planning applications for new waste facilities.

6.108 Waste management facilities can potentially be located on a wide range of sites. Some modern waste management processes are similar in nature to other forms of industrial development and can occupy similar types of sites. Existing waste management facilities within the Joint Plan area are located on a variety of sites including industrial estates, previously developed land and existing and former mineral workings.

6.109 Sites for landfill, particularly for biodegradeable waste, are largely constrained to voids with suitable geological characteristics. These typically comprise existing or former mineral workings, the locations of which are determined primarily by geology, where imported waste can be used to help restore the site. Groundwater pollution constraints and flood risk may be particularly important in determining suitable locations for some types of landfill activities.

6.110 The identification of suitable sites for waste facilities is also influenced by matters such as the scale of facility proposed, the nature of the processes involved and the area to be served by the facility. Other important constraints include environmental and local amenity considerations such as noise and odour and transport and access issues. Co-locational opportunities may arise where mutual benefits can be gained by locating particular types of waste facilities alongside certain other forms of development, such as those which can use the output of waste processes, or where the waste management needs of a waste producer can be met without the need for significant transport of waste. A further example is where waste processes which

generate energy can be located in proximity to users of heat and/or power, as well as near to appropriate grid connections. National planning policy supports the co-location of waste facilities alongside other complementary uses, as well as the need to ensure that any energy produced is used efficiently, preferably in the form of heat.

6.111 The characteristics of the Plan area also need to be taken into account. As a mainly rural area, with a highly dispersed settlement pattern and large areas of important environmental designations which may limit potential for development, opportunities to identify suitable sites for larger scale facilities of a more industrial nature are likely to be relatively limited, whereas there may be greater potential to identify suitable locations for smaller scale facilities.

6.112 As well as the general context referred to above, specific considerations are likely to apply to particular forms of waste development. For example, opportunities and constraints relating to sites for recycling and transfer activities, which can usually take place within buildings of a nature that can be accommodated on industrial estates and employment land, will be different to those that apply to large scale recovery or disposal operations.

Policy W11 - Waste site identification principles

Proposals and site allocations for new waste management capacity should reflect the following principles:

1) **Siting facilities for the recycling, transfer and recovery of waste (excluding energy recovery) on previously developed land, industrial and employment land, or at existing waste management sites, giving preference to sites where it can be demonstrated that co-locational benefits would arise taking into account existing or proposed uses and economic activities nearby. Where the site or facility is proposed to deal mainly with waste arising in rural areas then use of redundant agricultural buildings or their curtilages will also be acceptable in principle and, for agricultural waste, appropriate on-farm locations;**

2) **Siting facilities involving the recovery of energy from waste on previously developed land, industrial and employment land, or at existing waste management sites, giving preference to sites where it can be demonstrated that co-locational benefits would arise taking into account existing or proposed uses and economic activities nearby, including where the energy produced can be utilised efficiently. For facilities which can produce combined heat and power, this includes giving preference to sites with the potential for heat utilisation. Where the site or facility is proposed to deal mainly with agricultural waste through anaerobic digestion including energy recovery, then use of redundant agricultural buildings or their curtilages and appropriate on-farm locations will also be acceptable in principle;**

3) **Siting facilities to support the re-use and recycling of CD&E waste at the point of arising (for temporary facilities linked to the life of the associated construction project) and at active mineral workings where the main outputs of the process are to be sold alongside or blended with mineral produced at the site; as well as at the types of sites identified in bullet point 1 above, where these are well related to the sources of arisings and/or markets for the end product;**

4) **Siting facilities to provide additional waste water treatment capacity at existing waste water treatment works sites as a first priority. Where this is not practicable preference will be given to use of previously developed land or industrial and employment land. Where development of new capacity on**

greenfield land is necessary then preference will be given to sites located on lower quality agricultural land. **5) Providing any additional capacity required for landfill of waste through preferring the infill of quarry voids for mineral site reclamation purposes, giving preference to proposals where a need for infill has been identified as part of an agreed quarry reclamation scheme and where pollution control concerns can be mitigated to an acceptable level.** **In all cases sites will need to be suitable when considered in relation to physical, environmental, amenity and infrastructure constraints including existing and proposed neighbouring land uses, the capacity of transport infrastructure and any cumulative impact from previous waste disposal facilities, in line with national policy.**
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry
Key links to other relevant policies and objectives

W01, W02, W03, W04, W05, W06, W07, W08, W09, W10, S03, D02, D03, D04, D05, D06, D07, D08, D09, D10, D12	*Objectives2, 6, 7, 8, 9, 10, 11*
Monitoring: Monitoring indicator 37 (see Appendix 3)	

Policy Justification

6.113 National planning policy identifies a range of types of sites and areas which may be suitable for built waste management facilities. It indicates that consideration should be given to a broad range of locations including industrial sites, looking for opportunities to co-locate waste management facilities together and with complementary activities. It states that priority should be given to the re-use of previously developed land, sites identified for employment uses and redundant agricultural buildings and their curtilages. It also encourages the utilisation of heat as an energy source in the siting of low carbon energy recovery facilities in close proximity to potential heat customers. It is considered that these principles remain appropriate to guide identification of allocations for the Plan area and to provide an indication to developers and other users of the Plan of the types of sites that are likely to be considered suitable in principle for waste management facilities by the Joint Plan authorities.

6.114 Evidence supporting preparation of the Plan indicates the existence of a range of sites which are likely to be capable of hosting waste management facilities and which are broadly consistent with national and local policy objectives. This evidence includes a study by Fairhurst and Partners (Identification of Potential Locations for Built Waste Management Facilities January 2015) which identified a number of industrial estates and employment land locations across the Plan area which are likely to be suitable in principle subject to appropriate proposals coming forward. A number of site allocations for waste development have also been submitted which are also likely to be consistent with these principles.

6.115 In relation to landfill, the long history of minerals extraction activity in the Plan area has resulted in a substantial number of voids which, should a need for further landfill arise, provide opportunities which may be suitable in principle. In a number of cases reclamation through landfill is an agreed element of existing approved schemes, although in some cases sites have not yet received a permit for landfill from the Environment Agency. A number of significant constraints to landfill could arise in

association with particular proposals and these would need to be addressed through application of the development management policies in Chapter 9 of the Plan.

6.116 A range of site specific considerations may be relevant to determining the actual suitability of any specific sites or locations under consideration. National policy provides guidance on relevant criteria, which will need to be taken into account alongside any other relevant policies in the Minerals and Waste Joint Plan.

Sustainability Appraisal

Effects in relation to this policy are largely positive. The preference for locations close to where heat generated through Combined Heat and Power schemes can be utilised, would support climate change objectives as well as having a positive outcome for local communities and businesses. The principle of co-location could also have some positive impacts in terms of the economy, reducing transport miles, soils and land, and minimising resource use. Reference to national waste planning policy in relation to consideration of specific environmental and community issues, may lead to a number of positive impacts in the short to medium term as the NPPF and National Planning Policy for Waste cover issues relating to most of the SA objectives, however uncertain effects are recorded in the longer term as the implications of any future changes to national waste policy are unknown.

Some minor negative effects are recorded in relation to biodiversity (as habitats on previously developed land may be lost) and landscape (where less valued landscapes may endure negative effects).

Recommendations
Consideration could be given to supporting the re-use of other buildings (such as industrial buildings) for waste development.

Q04. Ref W11

Do you support the preferred policy approach? If not how should it be changed and why?

Chapter 7 Minerals and Waste Transport and Other Infrastructure

7.1 This section considers issues relating to minerals and waste transport infrastructure, as well as other infrastructure supporting the supply of minerals (often referred to as minerals ancillary infrastructure) throughout the Joint Plan area. It identifies policies to support the provision of any such infrastructure that may be needed.

Non-road transport Infrastructure for minerals and waste

7.2 Minerals and waste tend to be high bulk, often low value products which need to be moved from source to market or point of management. The majority of minerals and waste sold or managed in the Joint Plan area are transported by road via the existing network of strategic roads throughout the area. These are generally well developed on a north/south axis through the central part of the Joint Plan area, with fewer major east/west links. Road transport is not usually the most sustainable form of transport due to emissions, congestion and other impacts. However, in many cases it may be the only viable option because of the absence of suitable alternatives. Key exceptions to road transport of minerals in the Plan area include gas, which is transported by pipeline from production wells to the Knapton generating station, coal which is transported by rail from Kellingley Colliery, potash from Boulby Mine and small amounts of aggregate, which are imported into two rail linked facilities in the Selby area. Movement of waste is exclusively by road.

7.3 The NPPF aims to encourage sustainable methods of transportation, stating that 'encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion'. As sources of supply and demand for minerals are relatively dispersed, as are locations of waste arisings and management, road transport is likely to remain the main method of transport for minerals and waste produced or arising in the Joint Plan area for the foreseeable future. However, the potential benefits of alternative forms of transport, together with the support provided in national policy to use of such alternative transport modes, suggests that this is an issue the Plan should address. It will therefore be important to support any such opportunities that do arise, and to seek to protect relevant infrastructure. Safeguarding of transport infrastructure is addressed in Chapter 8.

7.4 There is a limited distribution of rail and water transport infrastructure suitable or potentially suitable for minerals and waste in the Joint Plan area and the majority is concentrated in Selby District. However, other parts of the network may have further potential or are currently used. For example, in the past crushed rock has been transported by rail from a quarry near Leyburn and potash is transported by rail from Boulby Mine in the North York Moors National Park to Teesside. The map below shows the rail and waterways network as well as known locations of other existing rail and water transport infrastructure in the area. These have been identified at this stage as they are either in current use for such activity or are understood to have been used previously for this purpose, or for the transport of other bulk products, and have not yet been subject to redevelopment for other uses.

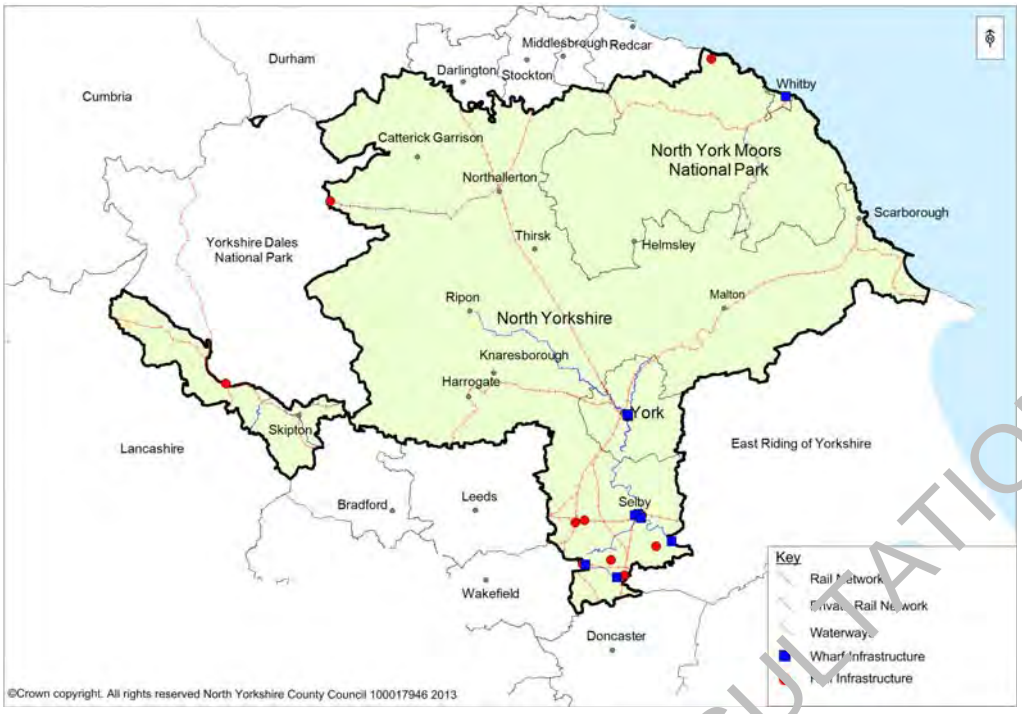

Figure 18: Wharf and rail infrastructure

7.5 A shift towards increased use of rail or water transport in the Joint Plan area would most likely arise through the bringing into use of existing infrastructure which is currently inactive, as this is likely to require less investment, and in circumstances where substantial volumes of minerals or waste require transporting to particular destinations for sale or processing and where the need for double handling is avoided or minimised.

Policy I01 - Minerals and waste transport infrastructure

The development of rail, water, pipeline or conveyor transport infrastructure, or use of existing such infrastructure, will be encouraged and supported for the transport of minerals and waste produced or arising in the Plan area, as well as for the reception of any large scale imports of minerals or waste into the area.

Where minerals or waste development involving the movement of an average of more than 250,000tpa of minerals or waste is involved, proposals should demonstrate that consideration has been given to the potential to move the materials by non-road means and where such potential is considered to exist should include a relative assessment of the benefits of the various modes considered in terms of carbon emissions.

Proposals involving the development of, or use of existing, non-road transport infrastructure (other than pipelines and conveyor systems) should also be well located in relation to the main road network in order to facilitate multi-modal movements of minerals and waste and will be required to demonstrate compliance with other relevant development management policies in the Plan. Where new minerals or waste transport infrastructure is proposed in the Green Belt the development should preserve openness and be consistent with the purposes of Green Belt designation.

Availability of sustainable minerals supply infrastructure is supported through a site allocation for the rail reception, handling and onward distribution of aggregate at:

Land at Barlby Road, Selby (MJP09)

Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals and Waste Industry	
Key links to other relevant policies and objectives	
M01, M03, W10, I02, S04, D01, D02, D03, D05, D07, D11	*Objectives 6, 7, 8, 10, 11*
Monitoring: Monitoring indicator 38 (see Appendix 3)	

Policy Justification

7.6 National policy encourages use of non-road transport wherever feasible and use of suitable alternatives to road can have benefits in terms of reducing overall environmental and amenity impacts.

7.7 As development of new non-road transport infrastructure is likely to require very substantial investment, relative to the likely volumes of material requiring movement at any particular locations in the Plan area, it is expected that in most cases additional rail and water transport will involve the bringing into use of existing inactive infrastructure rather than the building of new wharves or railheads. There may be greater potential for the development of new pipelines for the transport of gas and the use of conveyor systems, as these are less dependent on the location of pre-existing other infrastructure and may in some cases require less overall investment.

7.8 As use of alternative transport modes is more likely to be viable for larger volume movements, due to economies of scale, proposals for movements in excess of 250,000tpa should be accompanied by an assessment of the potential to move the minerals and/or waste by non-road means. This threshold is intended to ensure that the requirement only applies, within a North Yorkshire context, to large scale quarries and the most major waste management facilities. As part of this requirement the assessment should consider the likely differences in overall carbon emissions associated with the different modes considered and take these differences into account in the findings of the assessment.

7.9 As in many cases use of non-road transport modes will need to operate alongside an element of road transport (for example for distribution of minerals products to local markets, or the receipt of waste materials for onward bulk transport) proposals for development of new non-road transport infrastructure for minerals and waste, or the use of existing infrastructure for minerals and waste transport, should also be well located in relation to the main road network to help minimise overall impacts. Key exceptions to this may include the development of pipelines or conveyor systems for the direct transfer of minerals or waste products between production and processing facilities.

7.10 In all cases, proposal for development of new sustainable transport infrastructure, or the use of existing infrastructure, should be consistent with relevant development management policies in the Plan to ensure that unacceptable adverse impact on the environment or local amenity does not arise.

7.11 During preparation of the Plan a site at Barlby Road, Selby (MJP09) was put forward for consideration for allocation for the reception of aggregates by rail. This site is currently operational and helps contribute to the sustainable transport and supply of aggregate within the Plan area. However, its permitted life is linked to that of an adjacent roadstone coating plant and the longer term availability of rail-linked aggregates reception is uncertain. The allocation has been put forward in order to help secure this use in the longer term. The site has been assessed and is considered suitable for allocation and is therefore identified in the Plan as an allocation for rail reception, handling and onward distribution of aggregate.

Proposals for retention of aggregates related uses at this site will be supported subject to compliance with the development management policies in the Plan.

Sustainability Appraisal

This policy is likely to have some positive impacts through the retention of the existing rail, pipeline and water transportation infrastructure and support for the development of new infrastructure. These positive effects relate to reducing the need to transport minerals and waste by road with knock on benefits in relation to air quality, climate change, amenity and the economy. Impacts are uncertain in relation to a number of the environmental objectives such as biodiversity, water quality, landscape and cultural heritage as impacts will be dependent upon the location, type and scale of additional infrastructure as well as the frequency of its use. Negative impacts may occur as a result of construction on new transport links such as loss of habitats, impacts upon the setting of historic assets or loss of archaeology and landscape impacts.

Recommendations:
It is considered that positive effects could be further enhanced by adding a requirement for the consideration of non-road forms of transport wherever possible (rather than just for larger scale sites) and requiring a justification for not utilising them.

(Note - This recommendation has not been taken forward in the policy or text as the policy already encourages and supports use of alternative transport modes for all relevant development in the area. It is further considered that use of a threshold to determine whether there is a specific requirement for consideration of alternative transport modes is appropriate in order to give adequate clarity to applicants).

Q04. Ref I01

Do you support the preferred policy approach? If not how should it be changed and why?

Minerals Ancillary Infrastructure

7.12 In addition to transport infrastructure, supply of minerals is supported by a range of other associated infrastructure. This includes facilities such as plant and equipment for routine processing or preparing for sale of minerals extracted at the site. In certain circumstances these ancillary activities, together with their associated plant and buildings, may constitute permitted development under the Town and Country Planning (General Permitted Development) Order 1995 (as amended).

7.13 In some cases quarries, or sites for the supply of secondary or recycled aggregate, may also host specialist plant for processes such as manufacture of ready mixed concrete, roadstone coating and block making, which typically produce aggregates based products with value added, serving a range of market requirements. The policies in this section are concerned with this type of development. An important aspect of these additional activities, which are of industrial character, is that they are all dependant on the availability of mineral as a key raw material. Where ancillary infrastructure is located at the site of extraction then this can have the benefit of adding value before the raw material leaves the site and minimising the overall volume of material transported.

7.14 However, as they are not constrained to a particular location in the way minerals extraction is, in some instances infrastructure of this type may be ‘freestanding’ in

locations away from any associated minerals extraction site, such as on industrial or employment land.

7.15 Supply of recycled aggregate is partly dependent upon the amount of construction, demolition and excavation waste (CDEW) that is produced, which in turn is influenced by the level of construction activity taking place. Recycled aggregate may be produced from CDEW at certain types of waste management sites and some construction sites use mobile equipment to convert CDEW into recycled aggregate for immediate reuse either on the same site or elsewhere. Some existing quarry sites also act as sites for the production and supply of recycled aggregate, through import for blending with primary minerals worked at the site. Evidence suggests that the rate of reuse of CDEW is already high. To ensure this is maintained sites and proposals which help reduce or recycle CDEW should be supported by policy.

Policy I02 - Locations for ancillary minerals infrastructure

Development of ancillary minerals infrastructure at active minerals extraction sites and sites producing secondary aggregate will be supported provided the following criteria are met:

- **i) The ancillary development produces a 'value added' product based mainly on the mineral extracted or secondary aggregate produced on the host site; and**
- **ii) The development does not create significant additional adverse impact on local communities, businesses or the environment; and**
- **iii) The development does not unacceptably increase the overall amount of road transport to or from the host site; and**
- **iv) Where the host site is located in the Green Belt the ancillary development would preserve openness and the purposes of Green Belt designation; and**
- **v) The development is linked to the overall life of minerals extraction or supply of secondary aggregate at the host site, unless the location is appropriate to its retention in the longer term.**

Within the City of York area development of ancillary minerals infrastructure will also be supported provided the following criteria are met:

- **vi) The site is located on industrial or employment land, previously developed land, or would be co-located with other compatible industrial or commercial development; and**
- **vii) The site has good access to the transport network; and**
- **viii) The development would not create significant adverse impact on local communities, businesses or the environment including heritage assets.**

Siting of minerals ancillary infrastructure within the North York Moors National Park will only be supported where it would be located within the Whitby Business Park identified on the Policies Map.

Main responsibility for implementation of policy: NYCC, CYC and NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
M01, M03, M11, W05, W09, S05, D01, D02, D03, D04, D05, D09, D11	*Objectives 6, 7, 8*
Monitoring: Monitoring indicator 39 (see Appendix 3)	

Policy Justification

7.16 Within the two-tier part of the Joint Plan area development of this nature falls to be determined by the County Council where it would be located within a site permitted for mineral working. Development at freestanding sites will be the responsibility of the District and Borough Councils. Within the City of York and the North York Moors

National Park, which are unitary planning authority areas, proposals for free standing ancillary development will be within the scope of the Joint Plan.

7.17 Both active quarries and free standing sites may, in some circumstances, be appropriate locations for ancillary development. In many cases quarries will be suitable locations, particularly where a substantial proportion of the raw materials to be used are supplied directly from the host quarry, as this can help minimise overall transport movements. However, where substantial reliance on imported raw materials is needed, it may be preferable for ancillary activities to take place on free standing sites well located to transport networks and key markets for the products. In all cases it will be necessary to ensure that the ancillary activity will not result in unacceptable impact on the environment or local communities and businesses.

7.18 There are a small number of existing minerals extraction sites in AONBs in the NYCC area. Where ancillary development is proposed at quarries in the AONBs particularly high standards of siting, design and mitigation will be needed to ensure that any impacts will be acceptable.

7.19 There are currently no mineral workings in the National Park but a free standing concrete batching plant is located on a small industrial estate within the Park near Whitby. Environmental constraints in the National Park suggest it will not be appropriate to support further development of ancillary infrastructure elsewhere in this part of the Plan area.

Sustainability Appraisal

In the main the protections in this policy will avoid significant effects on the environmental objectives, though uncertainty is often noted due to uncertainty over locations where minerals ancillary infrastructure would take place and how 'additional significant environmental effects' may be interpreted by different developers, particularly if the host site already has significant impacts.

Elsewhere, mixed effects are often reported. For instance, the economic objective notes how this policy helps to add value to minerals products, but also the potentially restrictive nature of the policy which may make some development more difficult to achieve. The community vitality and health and wellbeing objectives note that synergies between different impacts, such as traffic, noise and visual impacts may together result in minor significant effects on perceptions of an area or on wellbeing.

Recommendations:
Given that secondary aggregate processing may have significant water impacts policy DO9 should be referred to in the key links to other relevant policies and objectives. In addition, to address synergies between effects, policy D02's reference to cumulative effects could be clarified in that policy's supporting text so that it includes synergies between different types of effect.

Q04. Ref I02

Do you support the preferred policy approach? If not how should it be changed and why?

Chapter 8 Minerals and Waste Safeguarding

8.1 Safeguarding of minerals resources, and minerals and waste infrastructure, is an important aspect of national policy and necessary to help ensure the long term sustainability of the area. This section identifies policies for safeguarding these important assets from encroachment or replacement by other forms of development.

8.2 The purpose of safeguarding is not to prevent other forms of development on or near to a resource or safeguarded infrastructure, but primarily to ensure that the presence of the resource or infrastructure is taken into account when other development proposals are under consideration. This is a particularly important issue within those parts of the Joint Plan area which are 'two tier', with the majority of development decisions taken by the District or Borough Councils rather than the minerals and waste planning authority.

8.3 In these circumstances, consultation between the District and County Councils will be required where certain other forms of development, with the potential to sterilise minerals resources or impact on important infrastructure, are proposed in a safeguarded area. Details of those types of development which are exempt from safeguarding are set out in the Safeguarding Exemptions List later in this Chapter. In many cases it may be practicable for arrangements such as prior extraction of a mineral, or other mitigation, to be put in place where potential conflict between minerals resources or minerals and waste infrastructure and other development pressures arise.

8.4 Areas of minerals resources proposed for safeguarding are shown on the Policies Map accompanying the Preferred Options draft Plan. A schedule of minerals and waste infrastructure sites proposed for safeguarding is provided in Appendix 2.

Safeguarding of Mineral Resources

8.5 Effective safeguarding of minerals helps preserve finite resources for the future, although there is no presumption that safeguarded resources will be worked. Sensitive development in close proximity to minerals resources can also impact on the ability to work a resource in future, as a result of the impacts necessarily involved in working some minerals, such as blasting. In some cases it may therefore be prudent to safeguard a limited buffer zone around the resource. The purpose of the buffer zone would be to ensure that the potential impacts of development near to but just beyond the resource boundary are also taken into account when considering the potential for sterilisation of minerals resources by other forms of development.

8.6 In 2011 North Yorkshire County Council commissioned the British Geological Survey (BGS) in 2011 to identify an approach to safeguarding of minerals resources in the NYCC area, based on best practice guidance. Consultation with the minerals industry took place during the project and views received were incorporated into the recommendations in the Report. Comparable studies have also been completed by BGS for the City of York Council and NYMNPA areas. The BGS reports are available to view at www.northyorks.gov.uk/mwevidence.

8.7 Whilst safeguarding is primarily concerned with managing potential conflict between minerals resources and other non-minerals development, in some cases the extraction of one underground resource has the potential to sterilise another due to the fact that areas of different resources can overlap. The extraction methods used

could also impact upon areas of underground mining for other resources, for example by causing instability or water ingress. The Plan area has a range of deep mineral resources namely coal (including coal bed methane), gas (including shale gas), gypsum, potash, polyhalite and salt. A particular consideration in the Plan area is the potential for hydrocarbons exploration and development activity in the eastern part of the Plan area to overlap with development of strategically important resources of potash and/or polyhalite.

Policy S01 - Safeguarding mineral resources

Part one - Surface mineral resources:

The following surface minerals resources and associated buffer zones identified on the Policies Map will be safeguarded from other forms of surface development to protect the resource for the future :

- **i) All crushed rock and silica sand resources with an additional 500m buffer;**
- **ii) All sand and gravel, clay and shallow coal resources with an additional 250m buffer;**
- **iii) Building stone resources and active and former building stone quarries with an additional 250m buffer.**

Part two – Deep mineral resources:

The following deep mineral resources and associated buffer zones identified on the Policies Map will be safeguarded from surface development to protect the resource for the future:

- **i) Underground coal resources within the Kellingley Colliery licensed area with an additional 700m buffer;**
- **ii) Underground potash and polyhalite resources within the Boulby Mine licensed area and Doves Nest Farm indicated and inferred resource area;**
- **iii) Underground gypsum deposits within the former Sherburn in Elmet Mine planning permission area;**
- **iv) Vein mineral reserves within extant planning permissions with an additional 250m buffer.**

Part three – protecting deep mineral resources from other underground minerals development:

Reserves and resources of potash and polyhalite identified on the Policies Map, including a 2km buffer zone, will be protected from sterilisation by other forms of underground minerals extraction and the underground storage of gas or carbon in order to protect the resource for the future.

Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and District and Borough Councils

Key links to other relevant policies and objectives

M01, M02, M03, M04, M05, M06, M07, M08, M09, M12, M13, M15, M16, M20, M21, M23, M24, M25, M26, S02	Objective 3

Monitoring: Monitoring indicator 40 (see Appendix 3)

Policy justification for safeguarding of Sand and Gravel/ Crushed Rock/ Silica Sand/ Clay/Shallow coal

8.8 A key recommendation of all three BGS reports for the Plan area was to safeguard the overall resource of sand and gravel with provision of a 250m buffer zone. The purpose of a buffer zone would be to ensure that the potential impacts of

development near to but just beyond the resource boundary are also taken into account when considering the potential for sterilisation of minerals resources by other forms of development.

8.9 With regard to safeguarding the overall resource of Jurassic, Magnesian and Carboniferous limestones, Carboniferous sandstones and chalk, provision of a 500m buffer consultation zone was recommended, taking into account potential impacts associated with working hard rock quarries, including the need for blasting.

8.10 As a relatively scarce mineral, safeguarding of silica sand resources will be important. Work carried out by British Geological Survey (BGS) indicates the presence of additional resources adjacent to both the Blubberhouses and Burythorpe sites and these resources will require safeguarding for the longer term. Work undertaken by BGS on behalf of NYCC recommends safeguarding all resources of silica sand and proposes a buffer zone around the resource of 500 metres to ensure the effective safeguarding of the resource area from other development proposed nearby.

8.11 The BGS Reports identified the resources of clay that should be subject of safeguarding, with a recommended 250m buffer zone, taking into account that clay is typically worked without the need for techniques such as blasting.

8.12 Although shallow coal is not currently being worked in North Yorkshire the Coal Authority recommends safeguarding the resource. Minerals Safeguarding reports produced by British Geological Survey (BGS) for NYCC and the NYMNPA also recommend safeguarding all of the shallow coal resource together with a 250m buffer zone.

Policy justification for safeguarding of Building Stone

8.13 Information on the distribution of building stone resources is less robust than for other forms of surface mineral in the Plan area. Geological deposits with potential to contain building stone resources are potentially very extensive across the area, although in practice it is likely that only relatively small parts of these will contain stone with the right technical and aesthetic properties to constitute viable sources of supply of building stone. BGS have developed an approach for safeguarding for the Plan area, in consultation with building stone specialists, which has led to the identification of a number of specific scarcer mineral resources, within which active working for building stone is taking place and which could be subject of safeguarding. However, some active building stone quarries lie outside the area identified in this way. In order to address this issue BGS have suggested that active quarries lying outside the proposed safeguarding areas are safeguarded, including through the use of a defined 250m buffer zone around them also.

8.14 Whilst the work by BGS has also revealed difficulties in clearly identifying important historic quarries across the Plan area, the work does nevertheless identify a number of former sites in the North York Moors National Park which may be important future sources of building stone for specific parts of the Park and for the repair of specific groups of buildings in and around the Park, based on the Strategic Stone Study. It is considered that these also should be subject of safeguarding with a 250m buffer zone.

Policy justification for safeguarding Underground Mineral Resources

8.15 Underground mineral resources are not at direct risk of sterilisation through surface development in the same way as surface resources and there is no specific requirement in national policy to safeguard them. However, certain forms of surface development, particularly large structures or those with sensitive processes taking place in them may be particularly vulnerable to subsidence damage.

8.16 Unlike for surface development, where it is proposed in most cases to safeguard the whole of the known resource, therefore including extensive areas of land where the resource is not currently permitted for working, for underground safeguarding it is only proposed to safeguard areas with planning permission for working or where resources have been identified with a relatively high degree of confidence, in order to ensure that a proportionate approach is followed.

Policy justification for safeguarding Underground Coal

8.17 Resources of coal are relatively extensive in the southern part of the Plan area and it is not considered appropriate to safeguard the whole of the potential resource. However, discussion with the Coal Authority, along with advice from British Geological Survey, suggests that it would be appropriate to safeguard coal reserves within the area licensed for extraction from Kellingley Colliery. Kellingley Colliery is the only active mine in the Plan area and there is no expectation of proposals for new underground coal mines to come forward. It is also now expected that Kellingley Colliery will close at the end of 2015. However, it is considered appropriate for the time being to safeguard the licensed area for the Colliery, together with a buffer zone, to allow for any potential reactivation of mining during the Plan period. The presence of more vulnerable forms of surface development in areas where underground coal mining occurs can lead to indirect sterilisation of coal. As subsidence effects at the surface can extend outwards beyond the area actually mined, vulnerable structures near to but outside the 'footprint' of worked areas can also be at risk. Safeguarding in this way not only helps protect the resource from sterilisation but also helps ensure that new, vulnerable surface development is protected from potential subsidence impacts.

8.18 In this respect the purpose of safeguarding underground coal is not to prevent surface development in the relevant area but to ensure that the potential implications for sterilisation of coal can be taken into account. Types of surface development which are considered relevant for the purposes of safeguarding underground coal are identified in Policy S02 (part two).

Policy justification for safeguarding of Potash and Polyhalite Resources

8.19 Resources of potash/polyhalite and salt cover a relatively large area in the north eastern part of the Plan area and it is not considered necessary to safeguard the whole of the potential resource area. However, it is considered that it would be appropriate to safeguard reserves and resources within the area licensed for extraction from Boulby Mine (the only active potash mine in the Joint plan area), along with those resources forming part of the York Potash project that have been identified with a higher degree of confidence. This will help ensure that, where certain types of surface development are proposed within the licensed area, consultation between upper and lower tier planning authorities takes place. In this respect the purpose of safeguarding underground resources is not to prevent surface development in the relevant area but to ensure that the potential implications for sterilisation of potash or polyhalite can be taken into account. Types of surface development which are considered relevant for the purposes of safeguarding

underground potash and polyhalite are identified in Policy S02 (part two). A surface safeguarding buffer zone has not been identified due to the scale of the area and the relatively low risk of sterilisation by surface development in this part of the Plan area.

8.20 Potash, salt and polyhalite resources in the Plan area are considered to be of strategic significance, with the potash and polyhalite deposits representing the only known potentially workable resources in the country. Extraction of gas in proximity to underground mining operations can give rise to particular concerns including the potential for gas to migrate towards, or accumulate in mine tunnels. This could be a particular issue where hydraulic fracturing ('fracking') techniques are involved. Similar considerations could apply where proposals are brought forward for the underground storage of gas or carbon, for example in depleted natural gas reservoirs.

8.21 In order to provide appropriate protection to reserves and resources of potash, salt and polyhalite from such effects associated with the extraction or storage of gas, specific safeguarding is considered appropriate, including an underground buffer zone in addition to the area proposed to be safeguarded in relation to surface development. A buffer zone of 2km is proposed at this stage following discussion with the operator of the active potash mine but views on the extent of any buffer are sought in response to the Preferred Options consultation. In some circumstances it may be practicable to take measures, such as through appropriate phasing of activity, to enable extraction of more than one underground resource in the same area. Where conflict could arise, applicants will need to demonstrate that appropriate measures can be implemented to ensure that the safeguarded resource is protected.

Policy justification for safeguarding of Gypsum

8.22 The distribution of resources of gypsum is not known with any certainty and it is not considered appropriate to safeguard the whole of the potential resource area. However, it is considered appropriate to safeguard gypsum reserves within the area permitted for extraction from Sherburn in Elmet Mine. Although the Mine has been closed for a substantial period of time, the planning permission remains extant, with an expiry date of 2042. Safeguarding the permitted resource could help allow for any potential reactivation of mining during the Plan period. Types of surface development which are considered relevant for the purposes of safeguarding underground gypsum are identified in Policy S02 (part two). A safeguarding buffer zone for gypsum has not been identified due to the low likelihood of the future resumption of mining.

Policy justification for safeguarding of Vein Minerals

8.23 There are isolated resources of vein minerals present in the Joint Plan area. In the absence of more specific evidence it is only practicable to identify those areas of reserves covered by existing dormant planning permissions. Inclusion of a buffer zone around these permissions would help ensure that the potential impacts of other forms of development proposed in proximity to the resource would be considered, in order to help protect the potential for existing permissions to be reactivated in future

Sustainability Appraisal

As safeguarding does not infer that minerals extraction will take place there are generally no predicted direct effects. Were development to take place it would need to accord with other policies in the Plan. This policy is likely to result in minor to major positive impacts in relation to encouraging the safeguarding of resources, economic growth and meeting the needs of a changing

population as future mineral resource sterilisation is avoided, thus conserving resources for future economic benefit. The safeguarding of buffer zones around mineral reserves may also have minor positive impacts in relation to minimising air quality and amenity impacts experienced by users of new proximal development.

Some uncertainty is noted in the assessment as the nature and location of any future development that may be displaced as a result of this policy, and the consequences of this displacement, is not known. However, some objectives noted that there could be some positive benefits from not developing the area which is safeguarded.

Recommendations:
No further mitigation is proposed

Q04. Ref S01
Do you support the preferred policy approach? If not how should it be changed and why?

Q07) Is a buffer zone of 2km adequate or necessary for the safeguarding of potash and polyhalite from the effects of other underground minerals development? If not what alternative approach or buffer zone would be preferable and why?

Development in Minerals Resource Safeguarding Areas

8.24 This section sets out how applications for development proposed in Minerals Resource Safeguarding Areas will be assessed.

8.25 As a two-tier planning system exists in the NYCC planning authority area, the District and Borough councils will be responsible for ensuring that relevant non-minerals development proposals that they determine in Safeguarding Areas are assessed appropriately. This can be implemented through using defined Minerals Consultation Areas, within which the District/Borough Councils would consult the County Planning Authority before decisions are taken on certain forms of development which could sterilise minerals resources. Policy S06 deals with Minerals Consultation Areas. Forms of development which, when proposed within Safeguarding Areas, are considered to be exempt from requirements for consultation are set out later in this section.

Policy S02 - Developments proposed within Minerals Safeguarding Areas

Part one - Surface mineral resources:

Within Surface Minerals Safeguarding Areas shown on the Policies Map permission for development other than minerals extraction will be granted where:

- **i) It would not sterilise the mineral or prejudice future extraction; or**
- **ii) The mineral will be extracted prior to the development (without unacceptable adverse impact on the environment or the amenity of local communities), or**
- **iii) The need for the non-mineral development can be demonstrated to outweigh the need to safeguard the mineral; or**
- **iv) It can be demonstrated that the mineral in the location concerned is no longer of any potential value as it does not represent an economically viable and therefore exploitable resource; or**
- **v) The non-mineral development is of a temporary nature that does not inhibit**

extraction within the timescale that the mineral is likely to be needed; or

vi) It constitutes 'exempt' development (as defined in the safeguarding areas exemption list).

Part two - Deep minerals resources:

In areas identified as Underground Mineral Safeguarding Areas on the Policies Map, proposals for the following types of development should be accompanied by information on the effect of the proposed development on the potential future extraction of the safeguarded underground resource, as well as on the potential for the proposed surface development to be impacted by subsidence arising from working of the underlying minerals resource:

- **Large institutional and public buildings;**
- **Major industrial buildings including those with sensitive processes and precision equipment vulnerable to ground movement;**
- **Major retail complexes;**
- **Non-residential high rise buildings (3 storeys plus);**
- **Strategic gas, oil, naphtha and petrol pipelines;**
- **Vulnerable parts of main highways and motorway networks (e.g. viaducts, large bridges, service stations and interchanges);**
- **Security sensitive structures;**
- **Strategic water pumping stations, waterworks, reservoirs, sewage works and pumping stations;**
- **Ecclesiastical property;**
- **Power stations; and**
- **Wind turbines**

Permission will be granted where the assessment demonstrates that a significant risk of adverse impact on the development from mining subsidence will not arise or that the criteria in Part one of the policy (other than the final criterion) are met.

Part three – Protecting deep mineral resources from other underground minerals development:

Where proposals for appraisal or development of underground gas resources or the underground storage of gas or carbon are located within the area safeguarded for potash, salt and polyhalite shown on the Policies Map, permission for development will only be granted where it can be demonstrated that the development will not adversely affect the potential future extraction of the protected mineral.

Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry and District and Borough Councils	
Key links to other relevant policies and objectives	
S01, S04, S05, S06	*Objective 3*
Monitoring: Monitoring indicator 41 (see Appendix 3)	

Policy Justification

8.26 The purpose of safeguarding is not to protect the minerals resource in all circumstances, but to ensure that the presence and potential significance of the resource is taken into account when other proposals in a safeguarded area are under consideration, and that sterilisation of the resource only takes place where there is appropriate justification. In some cases it may be practicable for prior extraction of the resource to take place, where this can be done without unacceptable impacts on local communities or the environment, in line with the development management policies in the Plan. In other cases the need for the sterilising development may

outweigh the need to protect the resource, or it may be possible to demonstrate that the safeguarded resource is no longer justified for safeguarding. Where non-exempt development (see Safeguarding Exemptions list) is proposed in a safeguarded area for surface mineral resources, or where development of the forms identified in Policy S02 (part two) is proposed in an area safeguarded for underground resources, applicants should consider at an early stage any implications for their proposals arising from the presence of the safeguarded resource and include information in any application about measures that would be implemented to avoid unnecessary sterilisation, or to demonstrate that the need for the sterilising development outweighs the need to protect the resource.

8.27 Certain forms of surface development proposals are unlikely to lead to significant sterilisation of minerals resources, even when proposed in a safeguarded area. These are identified in the Safeguarding Exemptions list later in this Chapter. Where development falls within the scope of the exemptions list then applicants do not need to address safeguarding issues in their proposals, and there is no requirement for planning authorities to consider minerals safeguarding issues when taking decisions on development proposals.

8.28 In order to implement an approach to safeguarding in the two tier part of the Joint Plan area it will be necessary for consultation to take place between District/Borough Councils and the mineral planning authority. Further information on the approach to this is set out in the section on Minerals Consultation Areas.

Sustainability Appraisal

In terms of the environmental sustainability objectives there are minor benefits from this policy, as arguably it would potentially reduce the amount of development in safeguarding areas, though to some extent some of this development would simply go somewhere else The assessment also picked strong benefits for the minimising resource use objective as safeguarding a broad range of minerals resources would help protect resources for possible future use. Similarly, an additional benefit was noted for climate adaptation as safeguarding potash and polyhalite will help save a key resource for manufacturing fertiliser, which ultimately will help tackle the issue of food security (which is a recognised climate change vulnerability).

There were however some minor negative effects noted in relation to the economy, community vitality and changing population objectives. This is because some economically valuable development may be deterred from taking place (though the policy does contain a criteria which considers the need for the development and whether this outweighs the need to safeguard the mineral), while some housing projects may also be less viable (though there are exemptions which help moderate this). The economy objective also records a long term benefit arising from having greater access to minerals for extraction.

Recommendations:
No further mitigation is proposed.

Q04. Ref S02

Do you support the preferred policy approach? If not how should it be changed and why?

Q08) Do you agree with the types of surface development identified under part two of Policy S02 as being relevant for safeguarding underground resources? If not what changes do you suggest and why?

Waste Management Facility Safeguarding

8.29 National waste planning policy requires all planning authorities, including non-waste planning authorities, to ensure that the impact of proposed, non-waste related development on existing waste management facilities and on sites and areas allocated for waste management is acceptable and does not prejudice the implementation of the waste hierarchy.

8.30 As not all waste management facilities are subject of planning permissions granted by the waste planning authority (for example they may be operating under established use rights or permitted uses under the Use Classes Order), comprehensive information on the full extent of the facility network in the Plan areas is not available. Also, it is likely that there will be significant changes to the network over the life of the Plan. It may not therefore be appropriate or practicable to identify all facilities for safeguarding in the Plan.

8.31 However, it may be practical for certain facilities or sites which are considered to be particularly important to be subject of specific safeguarding, and to safeguard any proposed site allocations for new waste development. More information about the approach to identifying relevant waste infrastructure for safeguarding can be found in the evidence base for the draft Plan.

Policy S03 - Waste management facility safeguarding	
Waste management sites shown on the Policies Map, including a 250m buffer zone, will be safeguarded from incompatible development. **Other forms of non-exempt development which would replace the safeguarded waste site will be permitted where there is overriding justification, or a suitable alternative location for the waste development can be provided. Where other forms of non-exempt development are proposed in the safeguarded buffer zone, development will only be permitted where adequate mitigation can, if necessary, be provided within the encroaching development proposals in order to reduce any impacts from existing or proposed adjacent waste uses to an acceptable level.**	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry	
Key links to other relevant policies and objectives	
W02, W11, S04, S06, D01, D02	*Objectives 2, 6, 7*
Monitoring: Monitoring indicator 42 (see Appendix 3)	

Policy Justification

8.32 Waste facilities are an essential part of the total infrastructure of an area and it is important that key facilities are protected in order to ensure their continued availability. Certain forms of waste infrastructure are relatively specialised or of strategic scale, or are in other ways particularly important in terms of the contribution they make to the overall network. In combination they contribute to delivering the objectives of moving waste up the hierarchy and dealing with it near to where it arises, in line with local, national and European policy and legislation.

8.33 As some waste uses are relatively low value developments, they are at risk from replacement by competing, higher value land uses. Safeguarding facilities can help prevent this. The purpose of safeguarding certain waste facilities is not to prevent other development from taking place but to ensure that the need to maintain important waste infrastructure is factored into decision making in other forms of

development. This will be particularly important in the two tier parts of the Plan area, where many development decisions are not taken by the waste planning authority.

8.34 In some cases, the introduction of other forms of development such as residential or certain community and commercial uses, in close proximity to established or allocated waste uses, can lead to conflict through the potential for impacts on local amenity or other important matters. The identification of a buffer zone around safeguarded waste facilities provides an opportunity to ensure that the potential for such impacts is taken into account and can therefore benefit both the continuing use of the waste facility, as well as the ensuring that any impacts associated with waste uses are taken into account where other forms of development are proposed in close proximity. A 250m buffer zone reflects the potential for significant impacts arising from some waste uses.

8.35 As a two-tier planning system exists in the NYCC area, it is the District and Borough councils that are responsible for ensuring that relevant non-waste related development proposals are assessed in line with this policy. The districts and boroughs will be required to consult the County Planning authority on any non-exempt development before any decision can be made on the application. Exempt development is identified at the end of this Chapter.

Sustainability Appraisal

It is not possible to identify effects against a number of environmental sustainability objectives as often the main sustainability effect arises as a result of the displacement of another type of development to an alternative location. It is unknown as to whether, through locating somewhere else, this displaced development would have greater or lesser sustainability effects than if it were to be allowed in the safeguarded area. On the other hand, there could be some positive benefits from not developing the area which is safeguarded.This policy may also however provide positive effects in relation to a number of objectives including minimising the use of resources, managing waste as high up the waste hierarchy as practicable and meeting the needs of a changing population. Minor negative impacts may arise should the policy result in facilities that manage waste lower down the waste hierarchy (e.g. landfill and incineration facilities) being safeguarded.

Recommendations:
No further mitigation is proposed.

Q04. Ref S03
Do you support the preferred policy approach? If not how should it be changed and why?

Q09) Is a buffer zone of 250m for the safeguarding of waste management facilities appropriate? If not what, if any, buffer zone would be preferable and why?

Minerals and Waste Transport Infrastructure Safeguarding

8.36 In order to ensure that opportunities for the sustainable transport of minerals or waste are protected for the future, it is important to safeguard relevant transport infrastructure sites in the Plan. The NPPF encourages the safeguarding of minerals transport infrastructure and states that mineral planning authorities should safeguard existing, planned and potential railheads, rail links to quarries, wharfage and associated storage, handling and processing facilities for the bulk transport by rail, sea or inland waterways of minerals. In the interests of sustainable development,

similar principles should apply to infrastructure with the potential for transport of waste.

Policy S04 - Transport infrastructure safeguarding	
Railheads, rail links and wharves identified on the Policies Map will be safeguarded against replacement development which would prevent the use of the land for minerals or waste transport purposes, unless; **i) The need for the alternative development outweighs the benefits of retaining the facility; or** **ii) A suitable alternative location can be provided for the displaced use; or** **iii) The facility is not in use and there is no reasonable prospect of it being used for minerals or waste transport in the foreseeable future.** **An additional 100m buffer zone around each facility, as shown on the Policies Map, is also safeguarded against encroaching development which would not be compatible with the use of the facility for minerals or waste transport. Where development in the safeguarded buffer zone would substantially restrict the continued use or potential future use of the facility for the transport of minerals or waste then permission will be refused unless adequate mitigation can be provided.**	
Main responsibility for implementation of policy: NYCC, CYC and NYMNPA and District and Borough Councils	
Key links to other relevant policies and objectives	
I01, I02, S01, S02, S03, S05, S06, D01, D02, D03	*Objectives 3, 7, 8*
Monitoring: Monitoring indicator 43 (see Appendix 3)	

Policy Justification

8.37 Transport infrastructure includes facilities or sites which are used, or which may provide potential for, non-road transport of minerals or waste, such as rail heads, sidings, and canal or river wharves. Some minerals, but not waste, are currently transported by rail via rail heads located in the Plan area, including coal from Kellingley Colliery, potash from Boulby Mine and the importation of aggregate into two rail linked sites in Selby district. There are a number of known facilities in the area, such as the rail link at the former Gascoigne Wood Mine site, also in Selby district, which have previously played a role in the transport of minerals, and where future potential may still exist.

8.38 Transport of coal by barge has previously occurred in the Selby area, and some infrastructure remains but needs repair if it is to be used again. Growing interest in the potential for increased supply of marine aggregate into the Yorkshire and Humber area may increase the significance of both water and rail transport of minerals in future, adding to the justification for safeguarding of wharfs and railheads.

8.39 In order to protect safeguarded facilities from encroachment by other non-compatible development which may compromise the continued use of the facility for the transport of minerals or waste, for example development which may be sensitive to disturbance from noise or dust, a buffer zone around safeguarded facilities has also been identified. Where proposals for non-exempt development in these zones would not be compatible with the safeguarded use then permission will be refused unless suitable mitigation can be provided as part of the proposals for the encroaching development.

8.40 In those parts of the Joint Plan area covered by both County and District tier planning authorities, District Councils should consult with the County Council as minerals and

waste planning authority before granting permission for non-exempt development in an area safeguarded for transport infrastructure. Exemption criteria are set out in the sections dealing with Safeguarding and Consultation, later in this Chapter.

Sustainability Appraisal

This policy would ensure that wharves and railheads/rail links are safeguarded for the transportation of minerals and waste but retains an element of flexibility to ensure that unused sites with little potential for future use or sites that would have greater benefit being used for an alternative purpose are not safeguarded. Positive impacts have been identified in relation to encouraging the use of more sustainable modes of transport, air quality, land use, climate change, resource use and the economy. There is an element of uncertainty throughout the assessment as safeguarding may displace other forms of development that may otherwise have taken place in an area and the consequences of this displacement is not known.

Recommendations:
No further mitigation is proposed.

Q04. Ref S04
Do you support the preferred policy approach? If not how should it be changed and why?

Q10) Is a buffer zone of 100m for the safeguarding of transport infrastructure appropriate? If not what, if any, buffer zone would be preferable and why?

Minerals Ancillary Infrastructure Safeguarding

8.41 National planning policy encourages the safeguarding of minerals ancillary infrastructure and states that mineral planning authorities should safeguard existing, planned and potential sites for concrete batching, the manufacture of coated materials and other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material.

Policy S05 - Minerals ancillary infrastructure safeguarding

Minerals ancillary infrastructure sites identified on the Policies Map are safeguarded against replacement development which would prevent the use of the land for minerals ancillary infrastructure purposes, unless;

- **The need for the alternative development outweighs the benefits of retaining the site; or**
- **A suitable alternative location can be provided for the displaced use; or**
- **The site is not in use and there is no reasonable prospect of it being used for minerals ancillary infrastructure in the foreseeable future.**

An additional 100m buffer zone around each site, as shown on the Policies Map, is also safeguarded against encroaching development which would not be compatible with the use of the site for ancillary minerals infrastructure. Where development in the safeguarded buffer zone would substantially restrict the continued use or potential future use of the site for minerals ancillary infrastructure then permission will be refused unless adequate mitigation can be provided.

Main responsibility for implementation of policy: NYCC, CYC and NYMNPA and District and Borough Councils

Key links to other relevant policies and objectives	
I02, D01, D02, S06	*Objectives 3, 6, 7*
Monitoring: Monitoring indicator 44 (see Appendix 3)	

Policy Justification

8.42 In many cases ancillary infrastructure is located at the site where the minerals they wholly or partly depend on are produced. In these circumstances they are protected from replacement by alternative forms of development by the associated minerals extraction permission and specific safeguarding is not required. As minerals extraction sites tend to be located outside urban areas, the risk of encroachment by other conflicting development is also relatively low.

8.43 In other cases, ancillary minerals infrastructure is located at free standing sites which don't receive similar protection. Such sites are typically on industrial estates where there may be a greater risk of competition from, or encroachment by, other forms of development which, if located in close proximity to the ancillary infrastructure, could impact on its future operation.

8.44 In order to ensure that sites for minerals ancillary infrastructure are protected for the future, known free standing ancillary infrastructure sites are therefore safeguarded in the Plan. Applicants for development which would result in the loss of a safeguarded facility should include information in their application to demonstrate how the safeguarded use will be protected, or is no longer appropriate for safeguarding, in line with the criteria in the policy.

8.45 In order to protect safeguarded facilities from encroachment by other non-compatible development which may compromise the continued use of the site minerals ancillary infrastructure, a buffer zone around safeguarded facilities has also been identified. Where proposals for non-exempt development in these zones would not be compatible with the safeguarded use then permission will be refused unless suitable mitigation can be provided as part of the proposals for the encroaching development.

8.46 In those parts of the Joint Plan area covered by both county and district tier planning authorities, District Councils should consult with the County Council as minerals and waste planning authority before granting permission for non-exempt development in an area safeguarded for ancillary infrastructure. Exemption criteria are set out later in this section.

Sustainability Appraisal

There are some very minor benefits that occur because this policy essentially reduces the likelihood of development within 100m of safeguarded sites. Alternatively it may displace some development, leading to uncertain effects (which depend on the location that development is displaced to).

Elsewhere in the assessment a strong benefit was noted relating to minimising resource use, as safeguarding land for ancillary infrastructure would cover land for facilities for processing and distribution of substitute, recycled and secondary aggregate material. Where this is the case an indirect positive effect on minimising resources is expected. The policy also allows an option for future minerals ancillary infrastructure development to happen which would add value to minerals and help promote economic viability.

Effects on communities and health are minimised by the application of the 100m buffer, whereas mixed positive and negative effects were predicted for the changing population objective (as some limited housing development might be displaced, but minerals supply

would be facilitated).

Recommendations:
No further mitigation is proposed.

Q04. Ref S05

Do you support the preferred policy approach? If not how should it be changed and why?

Q11) Is a buffer zone of 100m for the safeguarding of minerals ancillary infrastructure appropriate? If not what, if any, buffer zone would be preferable and why?

Consultation Areas

8.47 The following policy addresses the consultation process between the District and Borough Councils and the County Council within that part of the Joint plan area falling within NYCC, where district matter development is proposed in safeguarding areas identified in the Minerals and Waste Joint Plan.

Policy S06 - Consideration of applications in Consultation Areas	
Where non-exempt development is proposed in an area safeguarded on the Policies Map for minerals resources, minerals transport infrastructure, minerals ancillary infrastructure and waste infrastructure, and the proposed development site is located outside the City of York and North York Moors National Park areas, consultation with North Yorkshire County Council will be required before permission is granted.	
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, and District and Borough Councils	
Key links to other relevant policies and objectives	
S01, S02, S03, S04, S05	*Objective 3*
Monitoring: Monitoring indicator 45 (see Appendix 3)	

Policy Justification

8.48 This policy only applies in those parts of the Joint Plan area outside the City of York and North York Moors National Park unitary planning authority areas. National policy states that Minerals Consultation Areas (MCAs) should be identified based upon areas defined as Mineral Safeguarding Areas (MSA). Within those areas District and Borough councils should consult the MPA and take account of any local minerals plan before determining a planning application for relevant non-minerals development within it.

8.49 As well as safeguarding minerals resources, the Plan seeks the safeguarding of minerals transport infrastructure and ancillary development, as well as important waste management infrastructure, in line with national policy. It is therefore appropriate to identify, within the NYCC area, corresponding consultation areas for these safeguarded areas too. Consultation will not be required where the development proposed is included in the list of exempt forms of development. As with minerals resource safeguarding, the purpose of consultation is to help ensure the implementation of the safeguarding policy requirements in those parts of the Joint Plan area where there is a 'two-tier' planning structure.

Sustainability Appraisal

In most cases this preferred option has no link with the SA objectives. However, there are positive effects in relation to three objectives. In terms of minimising resource use, this would prevent needless sterilisation of minerals resources. In terms of the historic environment building stone may be protected from sterilisation, and these benefits would also support the changing population objective. Similarly requiring consultation with the County Council over development affecting safeguarded infrastructure performs positively as it reduces the need for resource use and supports future supply and distribution of minerals for the population. Recommendations: No further mitigation is proposed.

Q04. Ref S06
Do you support the preferred policy approach? If not how should it be changed and why?

Safeguarding Exemption Criteria

8.50 The following application types will be regarded as 'exempt' development and, where proposed within an area safeguarded in the Minerals and Waste Joint Plan for surface minerals resources, minerals ancillary infrastructure, minerals transport infrastructure or waste infrastructure, do not require consideration under relevant safeguarding policies in the Plan:

- Infilling in towns and villages
- Householder applications within the curtilage of a property
- Advertisement applications
- Reserved matters applications
- Applications for new or improved accesses
- 'Minor' extensions/alterations to existing uses/buildings which do not fundamentally change the scale and character of the use/building
- 'Temporary' development (for up to five years)
- Agricultural buildings adjacent to existing farmsteads
- 'Minor' works such as fences, bus shelters, gates, walls, accesses.
- Amendments to current permissions (with no additional land take involved)
- Changes of use
- Applications for development on land which is already allocated in an adopted local plan where the plan took account of minerals and waste safeguarding requirements
- Listed Building Consent and applications for planning permission for demolition in a conservation area
- Applications for work on trees or removal of hedgerows
- Prior notifications for telecommunications, forestry, agriculture and demolition
- Certificates of Lawfulness of Existing Use of Development and
- Certificates of Lawfulness of Proposed Use or Development.

Q12) Do you agree with the safeguarding exemption criteria listed? If not what changes would you suggest and why?

Sites proposed for safeguarding

8.51 Policies S03, S04 and S05 deal with the safeguarding of individual waste sites, transport infrastructure, (rail and wharves), and stand-alone minerals ancillary infrastructure. Safeguarding the sites will aim to protect them from replacement or from the encroachment of unsuitable development which could limit or stop the use of the site for minerals and waste activities.

8.52 Location details and plans of the sites which are considered appropriate for safeguarding under these policies are included in Appendix 2. The individual plans in the appendix do not include the suggested buffer zones mentioned in the policies, but the relevant buffer zone has been added to each site as shown on the Policies Map, which can be viewed at www.northyorks.gov.uk/mwconsult .

Q13) Do you agree with the sites which have been identified for safeguarding under policies S03, S04 and S05 in Appendix 2? If not what changes do you suggest?

Chapter 9: Development Management

9.1 The following sections deal with a range of issues that may be relevant to consideration of all planning applications for minerals or waste development in the Joint Plan area.

Presumption in favour of sustainable minerals and waste development

9.2 At the heart of the National Planning Policy Framework is the principle of sustainable development, which should be seen as a golden thread running through both plan making and decision making. This forms the basis of the Government's 'model policy' on the presumption in favour of sustainable development.

Policy D01 - Presumption in favour of sustainable minerals and waste development	
When considering development proposals the Authorities will take a positive approach that reflects the presumption in favour of sustainable development contained in the NPPF. The authorities will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area. **Planning applications that accord with the policies in this Local Plan (and where relevant with policies in neighbourhood plans) will be approved without delay, unless material considerations indicate otherwise.** **Where there are no policies relevant to the application or relevant policies are out of date then the Council will grant permission unless material considerations indicate otherwise – taking into account whether:** • **Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the NPPF taken as a whole; or** • **Specific policies in the NPPF indicate that development should be restricted such as in National Parks and AONBs. Where proposals constitute major development in the National Park and AONBs they will be assessed against the requirements for major development in designated areas set out in national policy.**	
Main responsibility for implementation of policy: NYCC, CYC and NYMNPA and Minerals and Waste industry	
Key links to other relevant policies and objectives	
V10, I01, I02, D02, D04, D11	*Objectives 1; 2; 4, 5, 6, 7, 8, 9, 10, 11, 12*
Monitoring: Monitoring indicator 46 (see Appendix 3)	

Policy Justification

9.3 Paragraph 14 of the NPPF states that the presumption in favour of sustainable development would not apply where specific policies in the Framework indicate that development should be restricted and includes reference in a footnote that this includes National Parks and AONBs, as well as certain other designations[51]. Whilst the 'model policy' contains a cross reference to other parts of the NPPF which would

[51] These include sites protected under the Birds and Habitats Directives, Sites of Special Scientific Interest, Green Belt, Local Green Space, Heritage Coast

restrict development, as around a third of the Plan area is within either the North York Moors National Park or one of the AONBs, it is considered appropriate to refer to these specifically in the policy.

9.4 In the National Park and AONBs proposals for 'major development' (which is not defined in legislation or guidance) should be refused except in exceptional circumstances and where it can be demonstrated they are in the public interest. Within these parts of the Plan area the presumption in favour of sustainable development may also need to be applied in the context of this requirement. As there is potential for minerals and waste development to constitute major development it is considered appropriate to refer to this requirement in the policy.

Sustainability Appraisal

Most environmental SA objectives report neutral effects in the short and medium term as a result of this policy as this is largely an affirmation that the policies in the Plan, and national policy and Neighbourhood Plans, will be taken into account. However, uncertainty creeps into the assessment in the longer term as some locally distinctive issues may get a lesser degree of emphasis if the NPPF becomes the sole decision making document when the plan becomes out of date. In terms of National Parks and AONBs however, the continued application of the major development test positively supports the long term outlook for achieving the landscape objective.

The preferred policy supports the economic objective due to its 'pro-active approach' to finding solutions. It also supports the community vitality, wellbeing and population needs objectives in the short and medium term as it takes into account community defined Neighbourhood Plans. In the longer term the policy makes decision making more reliant on national policy than local views.

Recommendations:

No specific recommendation is made. However, when policies in the Plan become out of date they should be updated to ensure that a locally relevant approach to sustainable development is still applied.

Q04. Ref D01

Do you support the preferred policy approach? If not how should it be changed and why?

Development Management Criteria

9.5 Planning law requires that planning applications be determined in accordance with the development plan unless material considerations indicate otherwise. In considering proposals for minerals development the NPPF indicates that Local Plans should contain a limited set of development management policies.

9.6 There are a range of matters which need to be considered in determining planning applications for minerals and waste developments, in addition to the strategic considerations relating to minerals supply, provision of waste management capacity and related infrastructure which are discussed in the preceding Chapters. These include protection of the environment and local communities and, where applicable, reclamation and aftercare requirements.

9.7 The NPPF requires minerals plans to 'set out environmental criteria to ensure that minerals operations do not have unacceptable adverse impacts on the natural and historic environment or human health including from noise, dust, visual intrusion,

traffic, tip and quarry slope stability, differential settlement of quarry backfill, mining subsidence, increased flood risk, impacts on the flow and quantity of surface and groundwater and migration of contamination from the site; and take into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality'. National Waste Planning Policy requires planning authorities to give consideration to a range of effects including on water resources, land stability, visual intrusion, nature conservation, the historic environment, traffic and access, air emissions, dust, odour, vermin and birds, noise and vibration and litter.

9.8 The following sections present a range of development management policies for minerals and waste development. These policies would operate alongside any relevant strategic policies in the Plan, specific to that mineral or waste type or waste management method.

Local Amenity Issues

9.9 Although essential forms of activity, minerals and waste developments can, as a result of the nature and sometimes scale of activity, have the potential to cause adverse impacts on local communities (including residents, visitors and local businesses operating in those communities). A key role for the Plan is to help ensure that, where development does need to take place, it can be managed and controlled to ensure that unacceptable impacts on amenity do not arise.

Policy D02: Local amenity and cumulative impacts	
Proposals for minerals and waste development, including ancillary development and minerals and waste transport infrastructure, will be permitted where it can be demonstrated that there will be no unacceptable effects on local amenity and local businesses, including as a result of impacts from: noise, dust, subsidence, vibration, odour and other emissions to air, vermin and litter, public safety, visual impact arising from the design, scale and location of the development, site lighting, cumulative effects, or as a result of adverse impacts on the public rights of way network and access to open space including, in the National Park, on opportunities for enjoyment and understanding of the special qualities of the National Park. **Proposals will be expected as a first priority to prevent adverse impacts through avoidance, with the use of robust mitigation measures where avoidance is not practicable.** **Applicants are encouraged to conduct early and meaningful engagement with local communities in line with Statements of Community Involvement prior to submission of an application and to reflect the outcome of those discussions in the design of proposals as far as practicable.**	
Main responsibility for implementation of policy: NYCC, CYC and NYMNPA and Minerals and Waste industry	
Key links to other relevant policies and objectives	
D03, D06, D07, D08, D09, D10, D11	*Objectives 9, 10, 12*
Monitoring: Monitoring indicator 47 (see Appendix 3)	

Policy Justification

9.10 The potentially harmful impacts of minerals and waste proposals can often be avoided or minimised through careful siting, design and operational practices. This can include use of mitigation measures such as acoustic bunds, screen planting, dust suppression systems and sensitive placement of site lighting and applicants should give careful consideration to these and other relevant matters when bringing forward

proposals, having regard also to any relevant national guidance and standards. Some impacts may have a cumulative effect alongside other impacts associated with the proposed development, or in association with impacts from other nearby development. In some cases such effects may be 'synergistic' (i.e. in combination the effects amount to more than the sum of the individual effects). Such effects will also need to be taken into account by applicants bringing forward development proposals and by the Planning Authorities in taking decisions. In some instances, where it is not practicable to avoid an unacceptable level of impact, permission for new development may need to be refused.

9.11 Some activities, which may otherwise be regarded as unacceptable, may be necessary in the short-term to facilitate minerals extraction, including some noisy short-term operations such as soil and overburden stripping and therefore some flexibility will be required when setting noise limits. Regard will be had to any national guidance and standards in establishing such limits.

9.12 In many cases, particularly for larger scale development, it is beneficial for developers to have early discussions with local communities in the vicinity of the proposed development site. This can help ensure that local concerns and opportunities are taken into account in the design of the scheme, including any mitigation measures proposed. Early communication between potential applicants and local communities is supported in the Statements of Community Involvement adopted by the three Authorities and is also supported by national policy and guidance. Prospective applicants for planning permission are therefore strongly encouraged to carry out consultation with local communities in advance of submission of an application and, where practicable, reflect the outcome of that consultation in the design and implementation of the scheme.

9.13 Planning authorities are advised in national planning practice guidance not to duplicate other statutory means of pollution control. For example the Environmental Protection Act sets out a number of statutory controls which are administered by organisations such as the Environment Agency and District/Borough Council environmental health services. Examples include issuing of environmental permits for waste operations and crushing plant, and control of statutory noise nuisance. However, certain pollution control matters can also be relevant to determination of minerals and waste planning applications, particularly where they are relevant to the use and development of land. Applicants are advised to have early discussions with other relevant regulatory authorities to help ensure a coordinated approach where possible.

Sustainability Appraisal

Broadly this policy performs well against the sustainability appraisal objectives. In particular it strongly contributes to the wellbeing, health and safety objective. Although broadly positive for the economy as amenity is important to local businesses, there is an uncertain effect on the viability of some proposals.

Recommendations:
Although no mitigation is proposed for this policy it will be important to address the uncertain effect on the viability of local businesses through monitoring this aspect of the Plan.

Q04. Ref D02

Do you support the preferred policy approach? If not how should it be changed and why?

Transport of minerals and waste and associated traffic impacts

9.14 The provision and safeguarding of transport infrastructure, in order to help encourage a shift away from road transport towards greater use of alternative forms of transport, has been considered earlier in the Plan (see chapters 7 and 8). This section considers potential impacts associated with transport of minerals and waste.

9.15 Impacts from road haulage associated with waste and minerals development can include adverse effects on traffic congestion and highway safety and impacts on local amenity including through increased noise, dust and vibration where heavy vehicles pass through local communities or other sensitive locations. Air quality can also be affected e.g. through the use of heavy diesel fuels. It will therefore be important for any proposals involving additional traffic generation to address potential impacts and for adequate control measures to be used if necessary.

Policy D03 - Transport of minerals and waste and associated traffic impacts

Where practicable minerals and waste movements should utilise alternatives to road transport.

Where road transport is necessary, proposals will be permitted where;

- **There is capacity within the existing network for the level of traffic proposed; and**
- **Access arrangements are appropriate to the volume and nature of any road traffic generated and safe and suitable access can be achieved for all users of the site; and**
- **There are suitable arrangements in place for on-site manoeuvring, parking and loading/unloading; and**
- **Any adverse impacts can be appropriately mitigated for example by traffic controls, highway improvements and traffic routing agreements.**

For all proposals generating significant levels of road traffic, a transport assessment and green travel plan will also be required to demonstrate that opportunities for sustainable transport and travel have been considered and will be implemented where practicable.

Main responsibility for implementation of policy: NYCC, CYC and NYMNPA and Minerals and Waste industry	
Key links to other relevant policies and objectives	
W10, W11, I01, S04, I02, D02, D11	*Objectives 6, 7, 8, 11*
Monitoring: Monitoring indicator 48 (see Appendix 3)	

Policy Justification

9.16 Whilst national policy encourages greater use of alternatives to road transport it is recognised that, in the Joint Plan area, sources of supply and demand for minerals are relatively dispersed, as are locations of waste arisings and management. These factors, together with a relative absence of existing infrastructure in many parts of the Plan area to support the use of alternatives to road transport, suggests that road haulage will remain the main means of transport for the foreseeable future. Whilst use of alternative modes where practicable is therefore encouraged, it is also important to ensure that road transport is as sustainable as possible and controlled so as to minimise any adverse impacts. Vehicle movements can have a range of impacts, including cumulative impacts, such as on local amenity and in some cases

on the landscape and tranquillity and other development management policies in the Plan will therefore also be relevant in some circumstances.

9.17 It will therefore be important for any proposals involving additional traffic generation to address potential impacts and for adequate control measures to be applied if necessary. In some cases where additional movements are likely to be significant, applications should be accompanied by a transport assessment and/or a green travel plan. The purpose of these assessments is to help ensure that full consideration is given to measures to ensure the proposed transport arrangements for the minerals or waste involved, and the means of access to the site by staff and visitors, are as sustainable as possible. Prospective applicants are advised to contact the relevant planning authority at an early stage to establish whether a transport assessment and/or green travel plan is likely to be required in support of a particular proposal.

Sustainability Appraisal

Mostly this preferred policy option either supports or has no effect on the SA objectives. Key positives (all minor) relate to the transport, air quality, climate change, economic growth, community vitality and population needs objectives. Some uncertainty was noted in relation to the effect of road improvements etc. on sensitive landscapes as well as a mixed positive / uncertain outcome for the health and wellbeing objective as the policy supporting text currently does not link well to other policies relating to amenity and cumulative impacts.

Recommendations:
Better linkages between this policy and the landscape and amenity / cumulative effects policies in the supporting text would help reduce the uncertainties identified in this assessment.

Q04. Ref D03
Do you support the preferred policy approach? If not how should it be changed and why?

Protection of Important Assets

National Parks and AONBs

9.18 National Parks are designated under the 1949 Access to the Countryside Act. The North York Moors National Park was designated primarily for its landscape quality and diversity, and also hosts a variety of important habitats and thousands of historic assets as well as providing opportunities for enjoying impressive views and experiencing peace and tranquillity.

9.19 The statutory purposes of National Parks are set out in the 1995 Environment Act:

- 'conserve and enhance the natural beauty, wildlife and cultural heritage of the Park'; and
- 'promote opportunities for the understanding and enjoyment of the special qualities of the Park by the public'.

In pursuing these two purposes the 1995 Act also places a duty on National Park Authorities 'to seek to foster the economic and social well-being of local communities'.

9.20 The North York Moors Core Strategy and Development Policies, which provides the overarching planning policy for the National Park, is framed around delivering these National Park purposes and achieving sustainable development within the context of them. The North York Moors National Park Management Plan sets out the long term vision for the National Park and the special qualities of the National Park.

9.21 Areas of Outstanding Natural Beauty are also established under the 1949 Access to the Countryside Act and are designated for the quality of their flora, fauna, historical and cultural associations as well as scenic views. The landscapes of AONBs are defined as having the same value as those of National Parks. The Nidderdale AONB is recognised for its heather moorland to the west, where it abuts the Yorkshire Dales National Park, and its rolling farmland landscapes to the east. The Howardian Hills AONB is recognised for its woodland, rolling agricultural landscapes and parkland. Small parts of the Forest of Bowland AONB, characterised by upland fells and vast tracts of heather moorland, and North Pennines AONB, characterised by open heather moorland, are within the Joint Plan area. The same level of protection is afforded to both National Parks and AONBs in the NPPF.

9.22 Around a third of the Joint Plan area is within either the North York Moors National Park or one of the area's AONBs, and its western boundary adjoins the Yorkshire Dales National Park. The NPPF requires great weight to be given to conserving landscape and scenic beauty in the National Parks and AONBs. In the National Park the conservation of wildlife and cultural heritage are important considerations and should be given great weight. The NPPF also states that in determining planning applications, local planning authorities should, as far as practicable, provide for the maintenance of landbanks for non-energy minerals from outside National Parks and AONBs (as well as World Heritage sites, Scheduled Monuments and Conservation Areas) and this is considered earlier in this document in Chapter 5.

Policy D04 - North York Moors National Park and the AONBs

Part One – Major Development

Proposals for major development in the National Park, Howardian Hills, Nidderdale, North Pennines and Forest of Bowland Areas of Outstanding Natural Beauty will be refused except in exceptional circumstances and where it can be demonstrated it is in the public interest. The demonstration of exceptional circumstances and public interest will require justification based on the following:

- **The need for the development, which will include a national need for the mineral and the impact of the development on the national economy; and**
- **The impact of permitting it, or refusing it upon the local economy of the National Park or AONB; and**
- **Whether the development can technically and viably be located elsewhere outside the designated area, or the need for it can be met in some other way; and**
- **Whether any detrimental effect on the environment, the landscape and recreational opportunities, can be moderated to a level which does not significantly compromise the reason for the designation**

Part Two – All developments

Planning permission will be supported where proposals contribute to the achievement of, or are consistent with, the aims, policies and aspirations of the relevant Management Plan and are consistent with other relevant development management policies in the Plan.

Part Three – Proposals which impact the setting of Designated Areas **Proposals for development outside of the National Parks and AONBs will not be permitted where it would have a harmful effect on the setting of the designated area.**	
Main responsibility for implementation of policy: NYCC and NYMNPA and Minerals and Waste industry	
Key links to other relevant policies and objectives	
M12, M15, M16, M18, D02, D06, D07, D08, D11	*Objectives 6, 9, 10*
Monitoring: Monitoring indicator 49 (see Appendix 3)	

Policy Justification

9.23 The NPPF states that great weight should be given to conserving landscape and scenic beauty in National Parks and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these matters. The preferred policy approach develops and clarifies the wording set out in Paragraph 116 of the NPPF.

9.24 Major development in or adjacent to the boundary of a National Park or AONB can have a significant impact on the qualities for which the area was designated. National Planning Guidance states that what constitutes major development in National Parks is a matter for the decision maker. Whether an application is considered as major development will depend on its nature, scale and location and the extent to which it has more than a local impact. It should be noted that major development in terms of paragraph 116 of the NPPF is not the same as that defined under the Town and Country Planning Act (Development Management Procedure Order) (England) Order 2010.

9.25 For major development in the National Park and AONBs, the three strands of the major development test need to be addressed in order to determine whether the proposal represents an exceptional circumstance and is in the 'public interest'. One of the main considerations in this assessment should be the need for the resource itself and whether there are alternative sources available to meet any national need. The outcome of these considerations will then, where relevant, need to be assessed in accordance with the Habitats Regulations and other relevant policies contained in this Plan and the NPPF. Applicants will be expected to supply sufficient information to robustly demonstrate that proposals fulfil the requirements of the major development test.

9.26 Section 11A(2) of the National Parks and Access to the Countryside Act 1949, Section 17A of the Norfolk and Suffolk Broads Act 1988 and Section 85 of the Countryside and Rights of Way Act 2000 require that 'in exercising or performing any functions in relation to, or so as to affect, land' in National Parks and Areas of Outstanding Natural Beauty, relevant authorities 'shall have regard' to their purposes. The duty applies to all local planning authorities, not just National Park Authorities. The Planning Policy Guidance explains that this duty is relevant in considering development proposals that are situated outside National Parks or Area of Outstanding Natural Beauty boundaries, but which might have an impact on the setting of, and implementation of, the statutory purposes of these protected areas.

9.27 When considering the setting of National Parks and AONBs the issue is not whether the proposal will be seen but whether its scale, nature and location will detract from the special qualities of the area. One of the purposes of National Park designation is to promote opportunities for the understanding and enjoyment of the special qualities of the Park by the public. This purpose can be significantly eroded by development

located outside the National Park boundary, especially where the development would be prominent in context of the views into and out of the Park, particularly from important public rights of way, or where it would harm tranquillity and impact on the dark night skies. Applicants will be expected to demonstrate that proposals will not harm the special qualities of the AONBs and the North York Moors National Park. Although the Yorkshire Dales National Park is producing its own development plan for minerals and waste, consideration also needs to be given to any impact on the setting of this National Park from proposals in the Joint Plan area.

Sustainability Appraisal

Whilst the assessment identifies that there may be negative effects for the economy of these areas through restricting minerals and waste developments it also identifies potential positive effects on the tourism economy of maintaining these high quality environments. Particularly positive impacts have been identified in relation to recreation and leisure and landscape whilst some minor negative impacts have been identified in relation to land use, as development may be displaced to areas of higher agricultural land value and cultural heritage as this policy may restrict the supply of local building stone in the National Parks and AONBs.

Recommendations:
Overall the policy is considered to be largely positive and no further mitigation is proposed.

Q04. Ref D04

Do you support the preferred policy approach? If not how should it be changed and why?

Green Belt

9.28 The Government attaches great importance to Green Belts. The NPPF advises that when considering planning applications for development in such areas, substantial weight should be given to any harm to the Green Belt.

Policy D05 - Minerals and waste development in the Green Belt

Part one - minerals

Proposals for minerals development within the York and West Yorkshire Green Belts will be supported where they would preserve the openness of the Green Belt and are consistent with the purposes of Green Belt designation set out in national policy. Where minerals extraction in the Green Belt is permitted, reclamation and afteruse will be required to be compatible with Green Belt objectives.

Part two - waste

Proposals for most waste development in the Green Belt will be considered inappropriate and will only be permitted in very special circumstances. The following types of development may be appropriate in the Green Belt where it can be demonstrated that the openness of the Green Belt will be preserved and where significant conflict with the purposes of Green Belt designation would not arise:

i) open windrow composting;
ii) small scale on farm composting and anaerobic digestion;
iii) recycling of construction and demolition waste in order to produce recycled

	aggregate where it would take place in an active quarry or minerals transport site and is linked to the life of the quarry or site;
iv)	**short term waste sorting and recycling activity in association with, and on the same site as, other permitted demolition and construction activity;**
v)	**recycling, transfer and treatment activities at established industrial and employment sites in the Green Belt where the waste development would be consistent with the scale and nature of other activities already taking place at the site;**
vi)	**landfill of quarry voids including for the purposes of quarry reclamation and where the site would be restored to an after use compatible with the purposes of Green Belt designation;**
vii)	**small scale deposit of inert waste for agricultural improvement purposes or the improvement of derelict or degraded land; and**
viii)	**continued activities within the footprint of established waste sites in the Green Belt.**
Main responsibility for implementation of policy: NYCC and CYC and Minerals and Waste industry	
Key links to other relevant policies and objectives	
I01, S05, D02, D06, D08, D10, D12	*Objectives 9, 12*
Monitoring: Monitoring indicator 50 (see Appendix 3)	

Policy Justification

9.29 There are significant areas of Green Belt in the Joint Plan area, including parts of the West Yorkshire Green Belt (affecting parts of Selby District and Harrogate Borough) and the York Green Belt (affecting parts of Ryedale, Hambleton and Selby Districts as well as the City of York area). A detailed inner Green Belt boundary for York is yet to be defined, along with parts of the outer boundary.

9.30 Minerals extraction can only take place where suitable resources occur and there is significant overlap between the distribution of some resources (such as Magnesian Limestone) and the Green Belt. There are a number of long established quarries in the Green Belt in Selby District. National policy states that minerals extraction in the Green Belt is not inappropriate, provided the openness of the Green Belt is preserved and where it would not conflict with the purposes of including land in the Green Belt. The purposes of the Green Belt as defined in national policy are:

- to check the unrestricted sprawl of large built up areas;
- to prevent neighbouring towns merging into one another;
- to assist in safeguarding the countryside from encroachment;
- to preserve the setting and special character of historic towns; and
- to assist in urban regeneration, by encouraging the recycling of derelict and other urban land

9.31 It is likely that in many cases suitably designed, landscaped and restored minerals workings can be accommodated in the Green Belt. Where proposals for extraction in the Green Belt are made, applicants should ensure that careful consideration has been given to the potential impact of the development on the openness of the Green Belt and in relation to the purposes of Green Belt designation, including the impact from any associated plant and infrastructure. Particular consideration should be given to the impact of proposals for the exploration, appraisal and development of unconventional gas resources in the Green Belt, owing to the particular characteristics of, and potential impacts associated with, this form of development. In all cases appropriate design and mitigation measures should be incorporated where necessary and it will also be necessary to ensure that any proposed afteruse is compatible with Green Belt objectives.

9.32 Waste management activities are generally not constrained by geology in the same way as minerals extraction and there is therefore more locational flexibility. However, other national policy has a bearing on the choice of locations for waste management, not least the proximity principle and the benefits of ensuring that waste facilities are well located in relation to main sources of arisings, which tend to be in the more urbanised parts of the Plan area. As Green Belt is designated in association with larger urban areas there can therefore be some conflict between identifying suitable locations for waste facilities, and protection of the Green Belt.

9.33 National waste planning policy indicates that planning authorities should first look for suitable sites and areas outside the Green Belt for waste management facilities that, if located in the Green Belt, would be inappropriate development and local planning authorities should recognise the particular locational needs of some types of waste management facilities when preparing their Local Plan.

9.34 It is considered that there could be some circumstances within the Plan area where waste development in the Green Belt would be acceptable in principle. This includes a number of types of waste management activities and types of specific locations where development would be less likely to cause harm to openness and the purposes of Green Belt policy objectives.

9.35 In particular, they include activities which are typically associated with rural areas such as open composting, or are small scale and temporary activities co-located with other development already taking place in the Green Belt. The Harewood Whin site in the City of York is a well-established waste facility in the Green Belt, where a range of waste management activities are taking place. The site plays an important strategic role in the management of waste arising in North Yorkshire and is located in close proximity to York as the largest urban centre in the Plan area. It is considered that further development within the footprint of existing sites such as this could be appropriate in principle provided that any existing impact on openness, or extent of conflict with the purposes of Green Belt designation associated with the site, would not be significantly increased.

9.36 As with minerals development, where proposals for waste development in the Green Belt are made, applicants should ensure that careful consideration has been given to the potential impact of the development on openness and in relation to the purposes of Green Belt designation and that appropriate design and mitigation measures are incorporated where necessary.

Sustainability Appraisal

For some SA objectives the predicted effects for the waste and minerals parts of this preferred policy diverge, with a continuation of minor positive effects resulting from minerals development noted for the transport and climate change objectives, while at the same time negative effects are noted that arise from the lack of consideration of locational factors in relation to waste sites in the Green Belt. Similarly, for the economy SA objective, while minerals sites may continue to bring jobs to Green Belt communities, waste related jobs may become scarcer.

Elsewhere effects are broadly neutral or positive, with strong positive effects noted for landscape. The soils objective notes positive effects from the policy's approach to waste in relation to conserving soils (as in the Green Belt allowable waste development will mostly be located in places such as quarry voids or established industrial sites), while negative effects are noted for minerals development (as the Green Belts coincide with a large amount of higher quality grade 2 and 3 land). Similarly effects on the waste hierarchy may be negative,

as the policy may drive some facilities to less optimal locations (which may affect the costs of operating waste sites or even viability for more some future facilities).

Recommendations:
This option largely complements national policy and affords a level of protection that, while having some minor effects, is balanced by a broad range of positive effects. Therefore no further mitigation is recommended.

Q04. Ref D05

Do you support the preferred policy approach? If not how should it be changed and why?

Landscape

9.37 The Joint Plan area has a varied landscape ranging from moorland to rolling farmland to low-lying areas, and seascapes characterised by high cliffs. Landscape is defined by the European Landscape Convention as 'An area as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'.

Policy D06 - Landscape	
Proposals will be permitted where it can be demonstrated that there will be no unacceptable impact on the landscape, having taken into account any proposed mitigation measures. **For proposals which may impact on nationally designated areas including the National Park, AONBs, Heritage Coast and the adjacent Yorkshire Dales National Park, including their setting, a very high level of protection to landscape will be required. Development which would have an unacceptable adverse landscape impact on these designated areas will not be permitted.** **Protection will also be afforded to the landscape setting of the historic City of York. Permission will only be granted for development which would harm the landscape setting of the City where the need for, or benefits of, the development outweigh the harm caused.** **Where proposals may have an adverse impact on landscape, tranquillity or dark night skies, schemes should provide for a high standard of design and mitigation, having regard to landscape character, the wider landscape context and setting of the site and any visual impact, as well as for the delivery of landscape enhancement where practicable.**	
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste Industry and Natural England	
Key links to other relevant policies and objectives	
D02, D04, D07, D08, D10, D12	*Objectives 9, 12*
Monitoring: Monitoring indicator 51 (see Appendix 3)	

Policy Justification

9.38 The variety of landscapes in the area adds much to its overall distinctiveness. A large part of the area is designated nationally (as either National Park or AONB or Heritage Coast) for the quality of its landscape, and some District and Borough Councils have identified local areas of landscape value in their own local plans. A

range of other designations are of relevance to landscape considerations, including heritage land which is conditionally exempt from inheritance tax because of its national significance[52]. Maintaining the setting of the historic City of York is also an important landscape consideration as it is not subject of specific statutory protection yet is a distinctive and important part of the Plan area. The Vale of York has a flat and low lying landscape with historic views of York Minster tower, Terry's clock tower and other landmark structures[53] and this setting within the landscape forms an intrinsic part of the city's historical significance. In considering impact on landscape setting, regard will be had to factors including the scale and character of the development proposed, any inter-visibility between the development site and the protected asset and the duration of the proposed development.

9.39 Although areas afforded specific protection through designations are of particular significance, all landscapes are important in their own right. Due to their nature and sometimes scale, minerals and waste developments can have significant impacts on the landscape. It is therefore important that, in bringing forward proposals, applicants give careful consideration to potential landscape impacts.

9.40 There are a number of Landscape Character Assessments (LCAs) covering the Joint Plan area, including those produced by District and Borough Councils, which provide a useful source of information relating to the various landscapes present in the area. In addition to the LCAs, a Historic Seascape Characterisation for the Scarborough to Hartlepool coastline is currently being undertaken by Historic England and a North Yorkshire and Lower Tees Valley Historic Landscape Characterisation programme has been produced. Applicants should utilise any available local landscape studies as a source of information to assist in the identification of any potential landscape impacts and mitigation.

9.41 In particular, such studies can assist in gaining a wider understanding of the significance of a location in landscape terms, and how a development proposal may impact not just on the immediate site but on any wider area it may influence. Particularly for larger scale proposals, including significant new minerals extraction and major new waste management facilities, especially in more rural locations, careful consideration should be given to the wider landscape setting and context of the site when designing schemes (including any mitigation). In some cases there may be opportunities to enhance local landscape character and quality, for example through landscape planting both on and offsite and as part of minerals site reclamation and applicants should look for opportunities to provide these as part of any proposals.

9.42 A study commissioned by NYCC with funding from Historic England in 2010 suggested that landscape provides an important context within which other important assets are found, particularly those relating to biodiversity and the historic environment. It is therefore important to ensure that proposals are informed by a good understanding of any such interactions, to help provide a more integrated approach to consideration of overall impacts and opportunities. The report also highlights the need for effective mitigation and management of any landscape impacts, and the need to ensure that connections between landscape and the natural and historic environment are considered and reflected in the design and implementation of proposals. For major schemes this is likely to require detailed pre-

[52] These areas are not identified under planning legislation but may be material considerations relevant to planning. A number of such areas have been designated in the Plan area. They largely coincide with areas already designated as National Park and AONB, where a high level of policy protection already exists. However some are found elsewhere in the Joint Plan area. Areas currently so designated can be viewed at https://www.gov.uk/tax-relief-for-national-heritage-assets .

[53] Further information can be found in the City of York Council Heritage Topic Paper update 2013

application research and discussion with relevant organisations. Mitigation of landscape impacts can be more difficult for minerals extraction in comparison to other types of development due to the need to locate development where the mineral is found. However, where a mineral is less scarce, there may be greater flexibility in siting to minimise impacts on the landscape. More information on the study can be found in the summary report http://www.northyorks.gov.uk/article/26667/Local-core-documents---managing-landscape-change-project-April-2012 .

9.43 An important aspect of the environment of the Plan area, of relevance to consideration of landscape, is the concept of tranquillity. Tranquillity mapping undertaken for CPRE in 2007 indicated that North Yorkshire was the 7th most tranquil of 117 County and Unitary authority areas, with a high degree of tranquillity particularly in the National Parks and AONBs and other less developed parts of the Plan area. A more recent survey by CPRE indicated that 72% of respondents identified tranquillity as the characteristic they valued most about the countryside, and protection of tranquil areas is an objective of the Management Plan for the NYMNP. Although tranquillity cannot be measured in any objective way, the potential for a development proposal to adversely impact on tranquility will be a matter to be taken into account when considering applications, particularly those located within or in close proximity to the National Park and AONBs.

9.44 A further consideration related to landscape, and which could potentially be impacted by minerals or waste development, particularly in the more rural areas, is the maintenance of dark night skies. The relatively undeveloped nature of large parts of the Plan area, particularly within the National Park and AONBs, mean that there are substantial areas with low levels of light pollution, leading to high quality starscapes at night which are increasingly rare in England. Proposals for minerals or waste development, particularly those with a requirement for significant amounts of external lighting and which are situated in rural locations should ensure that the impact of development on dark night skies is considered and that mitigation in the form of carefully designed and controlled site lighting is provided where necessary.

9.45 In those parts of the Plan area designated as National Park or AONBs, any proposals for major development will also need to satisfy the major development test. Effects on the landscape are a specific consideration under the Test.

Sustainability Appraisal

This policy is likely to result in a number of positive impacts particularly in relation to protection of the landscape. This is likely to also result in positive impacts in relation to cultural heritage, tourism and amenity in those areas of high landscape value. This policy may result in a clustering of development outside of the designated and high value landscapes in the plan area therefore resulting in cumulative negative impacts.

Recommendations:
Overall the policy is considered to be largely positive however it is considered that it could be strengthened by supporting the provision of landscape enhancements in association with minerals and waste development where this would be compatible with landscape character.

Q04. Ref D06

Do you support the preferred policy approach? If not how should it be changed and why?

Biodiversity and geodiversity

9.46 The NPPF requires planning policies to protect and enhance biodiversity by 'minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures'. The NPPF also requires planning authorities to set criteria based policies against which proposals for any development on or affecting protected wildlife sites will be judged. Plans should also be positive for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure at a landscape scale. Protection of geodiversity is also an objective of national planning policy.

Policy D07 - Biodiversity and geodiversity	
Proposals will be permitted where it can be demonstrated that there will be no unacceptable impacts on biodiversity or geodiversity, including on statutory and non-statutory designated sites, local priority habitats, habitat networks and species, having taken into account any proposed mitigation measures. A very high level of protection will be afforded to sites designated at an international or national level, including SPAs, SACs, RAMSAR sites and SSSIs. Development which would have an unacceptable impact on these sites will not be permitted. **Through the design of schemes, including any proposed mitigation measures, proposals should seek to contribute positively towards the delivery of agreed biodiversity and/or geodiversity objectives, including those set out in agreed local Biodiversity or Geodiversity Action Plans, or in line with agreed priorities of any relevant Local Nature Partnership, with the aim of achieving net gains for biodiversity or geodiversity.** **In exceptional circumstances, and where the development site giving rise to the requirement for offsetting is not located within a SPA, SAC, RAMSAR or SSSI, the principle of biodiversity offsetting to fully compensate for any losses will be supported. These circumstances include where:** **i) It has been demonstrated that it is not possible to avoid or mitigate against adverse impacts, and** **ii) The provision of compensatory habitat within the site would not be feasible; and** **iii) The need for or benefits of the development override the need to protect the site; and** **iv) Any compensatory gains would be delivered within the minerals or waste planning authority area in which the loss occurred.**	
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry, District and Borough Councils and Local Nature Partnerships.	
Key links to other relevant policies and objectives	
D02, D04, D05, D08, D09, D10, D12	*Objectives 9, 11, 12*
Monitoring: Monitoring indicator 52 (see Appendix 3)	

Policy Justification

9.47 The biological and geological diversity of the Joint Plan area is a fundamental aspect of its natural environment. A large proportion of the Joint Plan area's natural environment is designated at either European, national or local level for the importance of its habitats and/or species. There are also many non-designated areas that nevertheless provide valuable habitats or form important parts of wider ecological networks. Protected species may live outside designated areas and many

of these are also protected by law. Whilst there are many biodiversity sites and assets in the area, there are also a smaller number of geological SSSIs and regionally important geological sites which are subject of protection.

9.48 The protection and enhancement of ecological networks is becoming increasingly important due to changes in the climate. There are important links between biodiversity and the water environment, such as water quality issues for example, and with matters such as food production. The natural environment in effect provides a range of 'services' (known as ecosystems services) which it is important to help maintain and enhance. Biodiversity and geodiversity assets also form an important element of the green infrastructure[54] of the area and contribute to overall quality of life.

9.49 Minerals and waste developments have the potential to impact adversely on biodiversity and geodiversity. In addition minerals development, particularly through the process of quarry reclamation, is well placed to provide longer term enhancement of both biodiversity and geodiversity.

9.50 Applicants will need to demonstrate, when bringing forward proposals, that any potential impacts on biodiversity and geodiversity have been identified and addressed through mitigation where necessary. Opportunities should also be sought to deliver longer term enhancement. Proposals should be directed towards the delivery of any priorities already agreed for the area in which the site is situated, as set out in local Biodiversity Action Plans, Geodiversity Action Plans or through any strategy produced by the relevant Local Nature Partnership.

9.51 In some cases, it may be possible to deliver greater overall benefits through delivery of a coordinated approach in combination with other proposed development. This may particularly be the case for minerals extraction, where there are a number of workings taking place in the same area, for example in the corridors of the Rivers Swale and Ure and opportunities may arise at a landscape scale. The RSPB have indicated that the greatest opportunities can rise in relation to schemes with an area in excess of 200ha. Where as a result of the scale, nature or location of the development proposed, there are opportunities to deliver enhancement of biodiversity or geodiversity, including the provision of green infrastructure, applicants are encouraged to discuss their proposal with the relevant planning authority at an early stage in order to help ensure that a coordinated approach, and maximum overall benefits, taking into account existing permitted schemes and other relevant proposals, can be achieved where practicable.

9.52 In some limited circumstances if may be appropriate for compensatory provision to be made elsewhere for habitat losses resulting from development. Such 'Offsetting' should be viewed as a last resort measure where the need for, or benefits of, the development outweigh the need to protect the site and no other suitable location is available. It will generally be preferable for mitigation or compensation measures, if necessary, to be delivered at the development site rather than through offsetting at an alternative location.

9.53 Where development requiring offsetting is proposed, the arrangements for provision of the offsetting biodiversity gain should be set out as part of the proposals, and the location where the offsetting provision is to be made should be within the same minerals or waste planning authority area as the development giving rise to the need for offsetting. This is to help ensure that biodiversity assets are not displaced out of

[54] Green infrastructure is a network of multi-functional green space, both new and existing, both rural and urban, which supports the natural and ecological processes and is integral to the health and quality of life of sustainable communities. It includes parks, open space, playing fields, woodlands, allotments and private gardens.

the local area. A further consideration is that, in developing proposals for offsetting, consideration should be given to replacing the community and climate regulation value attached to the biodiversity of the site to be developed, in order to help ensure an appropriate overall level of gain in the interests of sustainability. In practice it is considered that circumstances necessitating offsetting in the Joint Plan area are likely to be very rare.

Sustainability Appraisal

This preferred policy will have a range of largely positive effects as through the protection and enhancement of biodiversity valuable ecosystem services, such as water or air quality improvements, carbon storage benefits, or increased access to outdoor space. It may also benefit the local economy, helping to ensure that the plan area remains attractive to tourists and investors. Some uncertainty was however noted in relation to biodiversity offsetting which while seeking to provide a net gain, might fail to fully replicate lost habitats (albeit that these are likely to be of local rather than national value), or might locate them some distance away from the original beneficiaries of habitats. Nonetheless, offsetting would provide minerals and waste developers with greater flexibility to locate in the best locations. Some negative effects were noted due the burden that this policy may put on new development.

Recommendations:
Broadly the policy is seen as positive in terms of most SA objectives. However, the uncertainties raised over biodiversity may benefit from additional clarification on the circumstances when it would be suitable (i.e. when exceptional circumstances might apply, the nature of the offset expected of developers and the geographical scope of its application)[55].

Q04. Ref D07

Do you support the preferred policy approach? If not how should it be changed and why?

Historic environment

9.54 'Heritage assets' are buildings, monuments, places, areas or landscapes identified as having a degree of significance meriting consideration in planning decisions. They includes those assets which are designated and those which exist on any local list maintained by local authorities. National planning policy requires any effects on heritage assets to be assessed in terms of the significance of the asset, and states that substantial harm should usually be avoided. National policy also requires that effects on the significance of any non-designated heritage assets be taken into account and that a balanced judgment should be made and, for all assets, that the desirability of sustaining and enhancing significance should be taken into account.

9.55 The setting of a heritage asset is also an important consideration. The NPPF defines the setting of a heritage asset as '*The surroundings within which it is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral*'.

[55] National guidance on biodiversity offsetting has not yet been finalised. Information on the pilot work and consultation work run by Defra is available at https://www.gov.uk/biodiversity-offsetting.

9.56 The Joint Plan area contains tens of thousands of heritage assets including Listed Buildings, Scheduled Monuments, a World Heritage Site, Registered Parks and Gardens, Registered Battlefields and Conservation Areas, as well as assets which are not yet identified or designated.

9.57 Minerals extraction, which may involve the large scale physical disturbance of land, may have a direct impact on heritage assets, including the potential for their physical destruction, and both minerals and waste development can impact on the setting of heritage assets, which can be of importance in contributing to their overall significance.

Policy D08 - Historic environment

Minerals or waste development proposals will be permitted where it can be demonstrated that they will conserve and, where practicable, enhance those elements which contribute to the significance of the area's heritage assets including their setting.

Particular regard will be had to the benefits of conserving those elements which contribute most to the distinctive character and sense of place of the Plan area including:

- **The World Heritage Site at Fountains Abbey/Studley Royal;**
- **The special historic character and setting of York;**
- **The archaeological resource of the Vale of Pickering, the Yorkshire Wolds, the North York Moors and Tabular Hills, and the Southern Magnesian Limestone Ridge.**

Proposals that would result in harm to a designated heritage asset (or an archaeological site of national importance) will be permitted only where this is outweighed by the public benefits of the proposal. Substantial harm or total loss to the significance of a designated heritage asset (or an archaeological site of national importance) will be permitted only in exceptional circumstances and where it can be demonstrated that substantial public benefits would outweigh that harm.

Proposals affecting an archaeological site of less than national importance will be permitted where they would conserve those elements which contribute to its significance in line with the importance of the remains. In those cases where development affecting such sites is acceptable in principle, mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.

Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry and Historic England.	
Key links to other relevant policies and objectives	
D06, D10, D11	*Objective 9*
Monitoring: Monitoring indicator 53 (see Appendix 3)	

Policy Justification

9.58 The Studley Royal including the ruins of Fountains Abbey World Heritage Site is a particularly important heritage asset as the only World Heritage Site in the Joint Plan area, and in 2012 an additional buffer zone was identified by the World Heritage Site Committee in order to help protect certain aspects of the visual setting and designed landscapes of the Site. The buffer zone is being identified in the Harrogate Borough Council Local Development Framework and is also shown on the Policies Map for

the Minerals and Waste Joint Plan. Regard will be had to the purposes of the buffer zone when considering proposals which may impact on the WHS.

9.59 Evidence produced by City of York Council in 2013[56] identifies six principle defining characteristics of York's historic environment to help describe the special qualities that set York apart from other similar cities in England. The is particularly significant as a result of the nature and concentration of heritage assets it contains and because of the significance of long distance views of landmark buildings such as the York Minster tower and Terry's clock tower from the wider Vale of York. Maintaining the wider setting of York is also of importance because of the significance of the City to the tourism and wider economy of the Joint Plan area, with the City receiving around 7 million visitors annually. The City as a whole is not subject of specific protection through any designations and it is therefore considered appropriate to provide a degree of protection from any adverse impacts on its setting from minerals or waste development.

9.60 The Vale of Pickering is also of particular significance. Evidence indicates a concentration of heritage assets, many of which are currently undesignated and in this part of the Plan area there is a close association between minerals resources and significant heritage assets. A Statement of Significance for the Vale has been produced for Historic England in recognition of a number of factors which include the realisation that the exceptional archaeological landscape identified between Rillington and Sherburn cannot adequately be managed through current approaches to designation along with the need for an agreed, clear statement on the special character, qualities and attributes of the Vale which can be incorporated into policy documents.

9.61 Discussion with Historic England has identified a number of other areas, based partly on National Character Area Profiles developed by Natural England https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles , within which archaeological resources are likely to be particularly significant, including the Yorkshire Wolds, the North York Moors and Tabular Hills and the Southern Magnesian Limestone Ridge. These are areas of known and well-documented archaeological potential which contain some of the highest concentrations of archaeological features in the country. Much of this is likely to be of national importance. There is a relatively close correlation between these areas and some mineral resources. However, for the most part, the archaeology within these landscapes is largely undesignated. In these areas in particular and other locations where evidence suggests that significant heritage assets occur, it will be particularly important that the extent, siting, design and implementation of any mineral working and reclamation proposals are informed by a detailed understanding of the wider historic and landscape context of the area.

9.62 Where necessary proposals should include comprehensive mitigation and management measures aimed at minimising adverse impacts and delivering enhancements, including to the longer term setting and the enjoyment and understanding of heritage assets where appropriate.

9.63 The Managing Landscape Change project, commissioned by North Yorkshire County Council with funding from Historic England, highlighted that the absence of formal designations within an area should not be used to imply an absence of archaeological significance. It could simply mean that heritage assets have not yet been discovered or have not previously been recognised. It suggests that by looking

[56] City of York Council Heritage Topic Paper update 2013

at the potential development site in its wider context it is possible to establish a more complete picture of the potential significance of a site and any heritage assets which could be affected, thus informing the most appropriate strategy for field evaluation of the site or area, in line with paragraph 128 of the NPPF. Interested parties bringing forward development proposals, particularly for minerals extraction in the NYCC area, are advised to review relevant advice in the report of the Managing Landscape Change Study, which is available on the NYCC website.

9.64 In all cases applicants for minerals or waste development are advised to seek information from the relevant Historic Environment Record when bringing forward proposals, and to discuss schemes with the relevant minerals and waste planning authority at an early stage where an initial review of available information suggests that there is potential for heritage assets to be impacted by a particular proposal. In cases where the partial or total loss of the significance of heritage assets is supported through the grant of permission, developers will be required to record and advance the understanding of the significance of the asset/s to be lost and to make this information publicly available.

Sustainability Appraisal

This policy would have particularly strong positive impacts in relation to the historic environment and landscape objectives. The policy would conserve and where appropriate enhance the historic environment and affords particular protection for the most significant historic assets within the plan area. Positive impacts are also likely to result in relation to tourism, recreation, community viability and vitality and the economy as this policy may boost tourism and conserve and enhance the special qualities of the National Park. Some negative impacts may result particularly in relation to the economy and meeting the needs of a changing population should this policy result in prevention of minerals and waste development due to historic environment considerations.

Recommendations:
There is an element of uncertainty in relation to the magnitude of positive impact that would result from this policy as it states that enhancements will be made 'where appropriate'. This policy could be strengthened by requiring enhancements to be made 'wherever possible'.

Q04. Ref D08

Do you support the preferred policy approach? If not how should it be changed and why?

Water Environment

9.65 Both minerals and waste development have the potential to impact on water resources and quality and can contribute to, or be at risk from, flooding. For example waste management activities may have the potential to cause pollution as a result of the nature of the processes taking place or the wastes being handled. Mineral sites, as well as landfill and land raise activities, for example through the presence of screening bunds or other alterations to landform, can impact on the flow of water during flood events. The NPPF requires that proactive strategies to mitigate and adapt to climate change should be put in place taking account of, amongst other matters, water supply and demand. It requires that environmental criteria be set out against which planning applications will be assessed so as to ensure that permitted operations do not have unacceptable adverse impacts on the flow and quantity of surface and groundwater and water habitats in terms of biodiversity. Furthermore, the NPPF requires that both new and existing development should be prevented from

contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of water pollution.

Policy D09 - Water environment
Proposals for minerals and waste development will be permitted where it can be demonstrated that no unacceptable adverse impacts will arise, taking into account any proposed mitigation, on: **Surface or groundwater quality;** **Surface or groundwater supplies and flows.** **In relation to surface and groundwater quality and flows a very high level of protection will be applied to principle aquifers and groundwater Source Protection Zones. Development which would have an adverse impact on principle aquifers and Source Protection Zones will only be permitted where the need for, or benefits, of the development clearly outweigh any harm caused.** **Permission for minerals and waste development on sites not allocated in the Plan will, where relevant, be determined in accordance with the Sequential Test and Exception Test for flood risk set out in national policy. Development which would lead to an unacceptable risk of, or be at an unacceptable risk from, surface, ground or coastal water flooding will not be permitted.** **Proposals for minerals and waste development should, where necessary or practicable taking into account the scale, nature and location of the development proposed, include measures to contribute to flood alleviation and other climate change mitigation and adaptation measures including use of sustainable urban drainage systems.**
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry and Environment Agency.
Key links to other relevant policies and objectives
D06, D07, D10, D11 | *Objectives 9, 10, 11*
Monitoring: Monitoring indicator 54 (see Appendix 3)

Policy Justification

9.66 Large parts of the Joint Plan area, particularly within the City of York area and lower lying parts of the NYCC area are at risk of flooding, as demonstrated in the Strategic Flood Risk assessment that has been prepared alongside the Plan. Flood risk maps are available on the Environment Agency's website. There are also substantial areas which are underlain by principle aquifers, including the Magnesian Limestone resource and some rocks of Jurassic age in the eastern part of the Plan area. Some of these areas also contain groundwater Source Protection Zones, which are identified by the Environment Agency in order to protect public drinking water supplies and certain supplies used for commercial purposes.

9.67 The Environment Agency has prepared a number of Position Statements setting out their likely approach to environmental permitting of various forms of development which may present a pollution hazard to groundwater. A number of these Statements are of relevance to minerals and waste development, including conventional and unconventional oil and gas, landfill, non-landfill waste activities and mining, quarrying and gravel extraction. In order to help ensure a general consistency of approach the planning authorities will, when implementing this policy, have regard to any relevant EA Position Statements in determining the acceptability of any proposal which has the potential to cause groundwater pollution.

Consideration should also be given to the aims and objectives of the Water Framework Directive, as this is a key piece of EU legislation governing protection of the water environment. Under the WFD, developers should take all measures necessary to ensure that no deterioration of local surface water bodies is caused by a development, and that every effort is made to provide appropriate mitigation measures to achieve this. Supporting the achievement of water status objectives outlined in River Basin Management Plans is important in meeting obligations under the Water Framework Directive. This can generally be demonstrated by achieving a relevant environmental permit flood defence consent or land drainage / ordinary watercourse consent.

9.68 National planning policy places considerable emphasis on the need to address flood risk, water pollution and water availability in planning decisions and includes specific national policy tests in relation to flood risk that are required to be met, in the form of a Sequential Test for flood risk and an Exception Test. The Sequential Test involves a risk-based approach to locating development. The aim of the Sequential Test is to steer new development to areas with the lowest probability of flooding. It operates together with a strategic level flood risk assessment which has been prepared alongside the Plan, in order to help ensure that policies and site allocations give appropriate consideration to flood risk. If, following application of the Sequential Test it is not possible, consistent with wider sustainability objectives, for the development to be located in zones with a lower probability of flooding, the Exception Test can be applied if appropriate.

9.69 Full details of the Tests can be found in the Technical Guidance on flood risk published alongside the NPPF. Applicants are advised to consider the Technical Guidance and national policy on flood risk at an early stage in developing proposals.

9.70 In some cases it may be necessary for a site-specific flood risk assessment to be carried out in support of an application. A site specific flood risk assessment is required for proposals of 1 hectare or greater in flood zone 1 and for all proposals for new development (including minor development and change of use) in flood zones 2 and 3. Further guidance is available in the Technical guidance accompanying the NPPF. Applicants should also consider the 'standing advice' on flood risk produced by the Environment Agency when preparing a site-specific flood risk assessment for lower risk development.

9.71 Different types of development have different vulnerabilities to flooding and some are considered to be 'water compatible'. Water compatible development includes some forms of development which fall within the scope of the MWJP, specifically sand and gravel extraction and sewage transmission infrastructure and pumping stations. These forms of development are appropriate within all flood zones. Most other forms of development within the scope of the Plan, such as other types of mineral working and processing as well as waste development (except landfill and hazardous waste facilities) are classed as 'less vulnerable'. These may be acceptable in all flood risk zones except Zone 3b (functional floodplain). Landfill and sites used for management of hazardous waste are 'more vulnerable' and should not take place in Zone 3b and would only be acceptable in Zone 3a if they meet the Exception Test. This Test requires it to be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a Strategic Flood Risk Assessment where one has been prepared, and; a site specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

9.72 Increased risk of flooding is one of the predicted impacts of climate change and should be taken into account in the preparation of flood risk assessments, in line with the Technical Guidance accompanying the NPPF. Minerals extraction, particularly water compatible sand and gravel working, can also provide opportunities to contribute to flood alleviation, for example through the provision of increased flood storage capacity where working is taking place in flood plains. Within the Plan area there is an overlap between sand and gravel resources and flood plains and some mineral extraction is already taking place in these locations. Where proposals are brought forward for sand and gravel working, consideration should be given at an early stage in preparing the scheme to the potential to incorporate flood alleviation measures into the design, particularly as part of site reclamation.

9.73 Consideration should also be given to the use of sustainable drainage systems for the management of surface water drainage. These are designed to control surface water run-off close to where it falls and to mimic natural drainage as closely as possible. This matter is addressed in Policy D11 dealing with sustainable design.

Sustainability Appraisal

This is a generally positive development management policy, with benefits to biodiversity, water, climate change mitigation and adaptation, the economy, community vitality, recreation, health and wellbeing and a changing population. It will work well alongside the environmental permitting and water licensing regimes.

Recommendations:
A reference to the importance of not impeding the achievement of water status objectives outlined in River Basin Management Plans (which is important in meeting obligations under the Water Framework Directive) in the supporting text could add some additional clarity for future development proposals. This can generally be demonstrated by achieving a relevant environmental permit flood defence consent or land drainage / ordinary watercourse consent.[57]

Q04. Ref D09

Do you support the preferred policy approach? If not how should it be changed and why

Reclamation and afteruse of minerals and waste sites

9.74 The nature of minerals development, which often involves permanent or long term physical change to land, sometimes on a substantial scale, means that it is important that consideration is given to how sites are reclaimed and used once workings have finished. In contrast, many waste developments, particularly modern developments not involving landfill, are permanent or long term built developments, which do not give rise to similar strategic considerations of reclamation and afteruse. However, some forms of waste development, such as landfill and proposals for temporary plant and buildings, do give rise to reclamation and afteruse considerations. Whilst the main focus of this section is therefore on minerals development, the policy it contains is also intended to be applied to relevant forms of waste development.

[57] See Environment Agency, 2014. Living on the Edge URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/403435/LIT_7114.pdf

9.75 The NPPF states that land worked for minerals should be reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites should take place, including for agriculture (safeguarding the long term potential of best and most versatile agricultural land and conserving soil resources), geodiversity, biodiversity, native woodland, the historic environment and recreation. It also states that bonds and other financial guarantees to underpin planning conditions should only be sought in exceptional circumstances.

9.76 Several parts of the Joint Plan area (such as parts of the Swale and Ure valleys and parts of the Vale of Pickering and Selby District) have over the years developed concentrations of mineral sites which can give rise to a number of issues regarding the long-term impact of working and reclamation, including progressive landscape change, impact on other environmental assets such as the historic environment, loss of good quality agricultural land, and impact on the setting and amenities of local communities. Some of these effects can be cumulative in nature, either over extended periods of time or through a number of simultaneous effects.

9.77 Reclamation also provides potential opportunities for delivery of benefits to the environment or amenity. For example, reclaimed sites can provide biodiversity or geodiversity gain in line with biodiversity and geodiversity action plans, opportunities for informal or formal recreation and, for certain areas, reclaimed sites may be able to play a role in flood risk reduction, or supply of water for agriculture, or for potential river recharge.

9.78 Pressure to divert waste away from landfill means that the traditional link between mineral working, and reclamation back to original ground levels through landfill, has now been largely broken. There has been a drop in landfill of biodegradeable waste, and this is likely to accelerate as new arrangements for management of residual waste arising in the Plan area are implemented. Increasingly, inert material is also being diverted away from landfill as it is subject to more re-use and recycling (such as is occurring with construction and demolition waste).

9.79 This means that forms of low level (i.e. below original ground level) reclamation are likely to be increasingly common. For hard rock quarries this is likely to mean that sites will be reclaimed to a landform significantly different to that which pre-existed the workings, and for sand and gravel quarries in river valleys where the water table is high, it would mean an ongoing likelihood of reclamation involving the creation of substantial lakes. As well as providing opportunities (e.g. for habitat creation, geodiversity and recreation opportunities), this can create challenges in terms of landscape impact and changes to the setting of communities and heritage assets, loss of agricultural land and, for reclamation involving lakes, potential conflict with airfield safeguarding requirements due to the attractiveness of lakes to flocks of birds.

9.80 Large parts of a zone running north-south through the central part of North Yorkshire are affected by airfield safeguarding areas, and there is a large degree of overlap between such safeguarding areas and the overall distribution of sand and gravel resources. This can impact on opportunities for water-based restoration, particularly for biodiversity, in order to ensure that any risk to aircraft from birdstrike[58] can be managed.

[58] Birds can be ingested in aircraft engines or cause other damage which presents a risk to an aircraft in flight. Larger birds, particularly those which congregate in flocks, tend to present the greatest hazard.

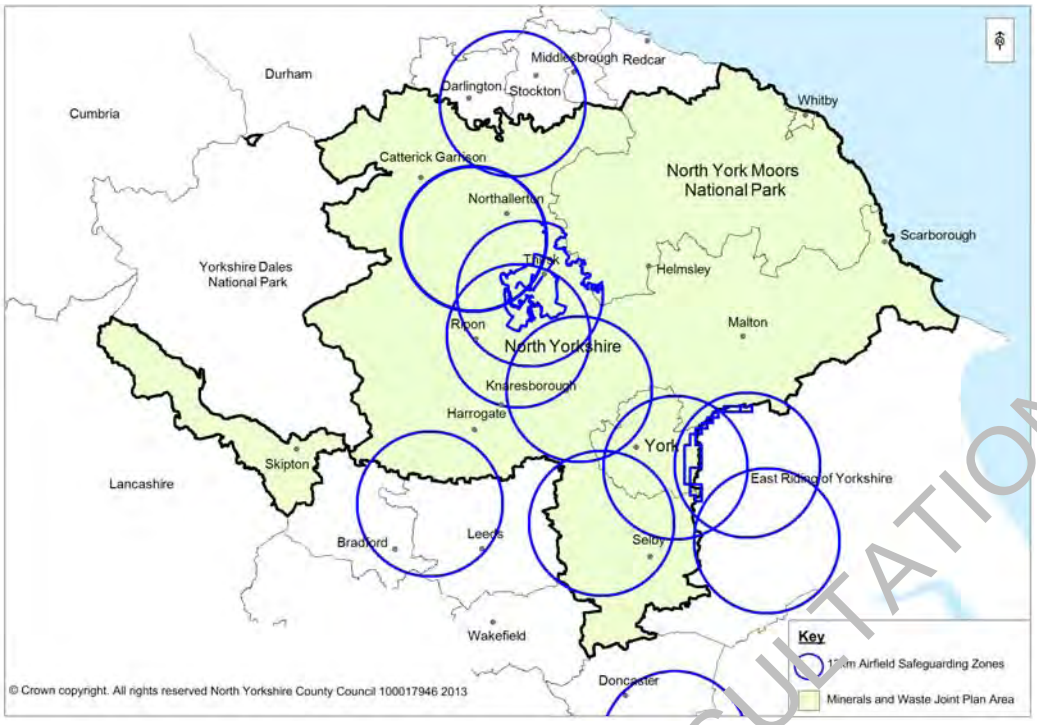

Figure 19: Airfield safeguarding zones

Policy D10 - Reclamation and afteruse

Part One

Proposals which require restoration and afteruse elements will be permitted where it can be demonstrated that they would be carried out to a high standard and which, where relevant, have demonstrably:

- **i) Been brought forward in discussion with local communities and other relevant stakeholders and where practicable reflect the outcome of those discussions;**
- **ii) Taken into account the location and context of the site, including the implications of other significant permitted or proposed development in the area and the range of environmental and other assets and infrastructure that may be affected, including any important interactions between those assets and infrastructure;**
- **iii) Reflected the potential for the proposed restoration and/or afteruse to give rise to positive and adverse impacts, including cumulative impacts, and have sought where practicable to maximise potential overall benefits and minimise overall adverse impacts;**
- **iv) Taken into account potential impacts on and from climate change factors**
- **v) Made best use of onsite materials for reclamation purposes and only rely on the need for importation of waste where essential to deliver an appropriate standard of reclamation;**
- **vi) Provided for progressive, phased restoration where appropriate and which provide for the restoration of the site at the earliest opportunity in accordance with an agreed timescale;**
- **vii) Provided for the longer term implementation and management of the agreed form of restoration and afteruse (except in cases of agriculture or forestry afteruses where a statutory 5 year maximum aftercare will apply).**

Part two

In addition to the criteria in Part One above, proposals will be permitted which

deliver a more targeted approach to minerals site restoration and afteruse by contributing towards objectives, appropriate to the location of the site, including where relevant: **i) In areas of best and most versatile agricultural land, prioritising the protection and enhancement of soils and the long term potential to create areas of best and most versatile land during reclamation of the site;** **ii) Where opportunities allow, particularly for sand and gravel extraction in the flood plains of the rivers Swale and Ure, providing additional flood storage capacity to help minimise flooding in upstream and downstream locations;** **iii) Within the National Park and AONBs, enhancing the special qualities of the designated area and/or providing opportunities for the enjoyment and understanding of those special qualities;** **iv) Within airfield safeguarding zones, particularly where reclamation for biodiversity is involved, ensuring that reclamation and afteruse proposals respect safeguarding constraints whilst maximising the potential restoration and afteruse benefits delivered by the site;** **v) In proximity to important heritage assets, ensuring that the significance of assets and their settings is sustained and where practicable enhanced and, also where practicable, that opportunities to facilitate enjoyment of the asset are provided;** **vi) Where the development is located within or adjacent to identified green infrastructure corridors, reflecting any locally agreed priorities for delivery of additional or enhanced green infrastructure and ecosystems services;** **vii) In proximity to major settlements within and adjacent to the Plan area, and subject to local amenity considerations, providing enhanced opportunities for informal and formal public access and recreation;** **viii) Delivering enhancements for biodiversity, improvements to habitat networks and the connectivity between these, including the creation of Biodiversity Action Plan habitats, based on contributing towards established objectives, seeking to deliver benefits at a landscape scale where practicable;** **ix) Creating geodiversity benefits where appropriate including contributing towards the delivery of priorities identified in any relevant Geodiversity Action Plan.**
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry
Key links to other relevant policies and objectives
D02, D04, D06, D07, D08, D09, D11, D12 | *Objectives 9, 10, 11, 12*
Monitoring: Monitoring indicator 55 (see Appendix 3)

Policy Justification

9.81 National planning guidance defines restoration as 'operations associated with the winning and working of minerals and which are designed to return the area to an acceptable environmental condition, whether for the resumption of former land use or a new use'. The process of restoring a site may also involve a period of aftercare, required to ensure the proposed use is implemented. The term 'reclamation' refers to the combined process of restoration and, where relevant, aftercare.

9.82 A high standard of reclamation is essential to ensure that development is sustainable and applicants for minerals or waste development where reclamation will need to demonstrate, as part of their initial proposals, how this can be achieved and the intended timescale for delivery. In bringing forward proposals, applicants should have regard to the advice in paragraphs 33 to 48 of the Technical Guidance to the National Planning Policy Framework (March 2012).

9.83 Applicants should liaise with host communities when developing restoration and afteruse proposals. This can help ensure that local views are taken into account at an early stage in the design of the scheme and that the proposals receive a higher level of local support.

9.84 It is also important, particularly for larger scale development, to ensure that the wider context of a development site, beyond its immediate boundaries, is taken into account, such as other permitted or proposed development in the local area and any potential for local cumulative impacts (both positive and adverse) on other relevant environmental, social or economic matters. By following such an approach it is likely that the overall potential of the reclamation proposals can be maximised, at the same time as any adverse impacts are minimised. Information to demonstrate how the wider context has been taken into account should be included in reclamation schemes and in most cases should be subject of pre-application discussion with the relevant planning authority.

9.85 The very varied nature of the Joint Plan area means that there are a wide range of contextual factors, constraints and opportunities that could be relevant to the reclamation of sites. In order to help ensure that, across the Plan area, maximum overall benefits are delivered, it is considered appropriate to use a more targeted approach to reclamation of sites. This can help avoid any tendency to seek to deliver a range of types of restoration and afteruse within a single site, which may undermine the overall potential of the reclaimed site to deliver positive sustainability benefits. This approach does not mean that all sites should necessarily only be restored to a single type of afteruse. It means that proposals should be directed towards specific objectives, relevant to the circumstances of the site and its location and taking into account the wider context of the area. In all cases, early discussion with the relevant planning authority is recommended when consideration is being given to restoration and afteruse proposals.

9.86 Whatever forms of reclamation are agreed, it will be necessary to ensure that appropriate safeguards and controls are in place to ensure the satisfactory long term afteruse of the land. Some afteruses, such as formal recreation, will need to be resolved through the submission of separate planning applications which, in some instances in the NYCC area, would need to be determined by the relevant district/borough council. In all cases, it will be important that reclamation and afteruse proposals brought forward by industry are developed in consultation with local communities and other relevant stakeholders, to help ensure that proposals reflect local opinion. Potential restoration schemes should be considered as part of the initial planning application.

9.87 Some forms of reclamation, particularly where the afteruse involves the creation of wildlife habitats, or where required in order to ensure a degree of continuing control over certain types of afteruse, such as informal recreation, may need to be subject of a longer term management agreement between the developer and/or landowner and the planning authority. Where such a requirement has been identified in any pre-application discussions with the planning authority, applicants should include details of proposed longer term management measures within their proposals. The use of Section 106 agreements will, where necessary, be used to ensure implementation of agreed longer term management arrangements.

9.88 In bringing forward proposals for minerals development giving rise to a requirement for reclamation, applicants should also refer to the good practice recommendations contained in the ‘Managing Landscape Change’ study commissioned by NYCC with funding from Historic England (available via the NYCC website). Applicants are

encouraged to incorporate relevant matters contained in the recommendations into their proposed approach.

Sustainability Appraisal

This policy is likely to result in largely positive impacts with particularly strong positive effects recorded in relation to biodiversity, land use, climate change adaptation, historic environment, flood risk and meeting the needs of a changing population due to the wide range of considerations promoted by the policy. A minor negative impact has been recorded in relation to resource use and encouraging re-use of materials as through encouraging the use of on-site materials above the importation of previously used ones/waste, this policy would not help with reducing the use of materials and encouraging their re-use. Uncertain effects are recorded in relation to sustainable waste management as the policy provides less scope for wastes other than those generated on site to be used in reclamation with uncertain implications for the management of other wastes.

Recommendations:
This policy is considered to be largely positive and no further mitigation is proposed.

Q04. Ref D10

Do you support the preferred policy approach? If not how should it be changed and why?

Sustainable design, construction and operation of development

9.89 Delivering a high standard of design, construction and operation for minerals and waste development is important because of the role this can play in contributing to factors such as:

- a high quality environment
- minimisation and mitigation of adverse impacts from new development
- efficient use of resources, including minimisation of waste
- reduction, minimisation and where necessary mitigation of climate change causes and effects

9.90 National planning policy gives priority to the achievement of high design standards as an important element of delivering sustainable development. As also set out in the NPPF, planning has a role in sustainable development through the need to mitigate and adapt to climate change and helping the country move towards a low carbon economy. Matters such as flood risk, coastal change and water supply are also relevant, with many parts of the area being vulnerable to flooding both from rivers and from surface water runoff.

9.91 Minerals deposits themselves can help to mitigate the effects of climate change, for example the presence in the ground of mineral resources, such as sand and gravel, can help to slow throughflow of water and therefore help contribute to flood attenuation or alleviation. However, minerals developments can also contribute to adaption to climate change, particularly where minerals site reclamation and afteruse include provision for matters such as flood water storage, habitat restoration and other forms of green infrastructure provision.

9.92 The movement of material up the waste hierarchy[59] can help mitigate climate change impacts. For example, recycling waste can save CO_2 through conserving virgin materials that would otherwise be used in production, and through reduction in landfill, which can lead to the emission of greenhouse gases.

9.93 The NPPF supports the inclusion of policies which set requirements for the sustainability of a building. The North York Moors National Park Authority has, since 2008, been operating a policy which requires 10% of predicted CO_2 emissions to be off-set through the generation of energy on-site from renewable resources for developments of 5 or more houses or other uses over 200sqm. The emerging City of York Local Plan is proposing to require that new developments meet the relevant BREEAM[60] or Code for Sustainable Homes standards.

Policy D11 - Sustainable design, construction and operation of development

Part one

Proposals for minerals and waste development will be permitted where it has been demonstrated that measures appropriate and proportionate to the scale and nature of the development proposed have been incorporated in the design, construction and operation of the development in relation to:

- **i) Reduction or minimisation of greenhouse gas emissions through incorporation of energy efficient siting, design and operational practices including those relating to bulk transport of materials;**
- **ii) Minimisation of waste generated by new minerals and waste development;**
- **iii) Generation and utilisation of renewable or low carbon energy where practical and in a manner appropriate to the character and location of the development;**
- **iv) Minimisation of water consumption through incorporation of water efficiency measures, including where practicable the re-use of waste water originating from the development;**
- **v) Measures to minimise flood risk associated with the development including use of Sustainable Drainage Systems and permeable surfacing;**
- **vi) A requirement for the relevant built or civil engineering elements of significant new minerals and waste developments to meet a minimum 'Very Good' BREEAM or CEEQUAL standard as appropriate;**
- **vii) For energy from waste development the efficient use of energy generated by the development including, for development with the potential for generation of combined heat and power, the beneficial use of heat either on site or to serve other existing or proposed development in the vicinity of the site;**
- **viii) Implementation of landscape planting comprising native species able to successfully adapt to climate change and where practicable incorporation of areas of new wildlife habitat that would help to improve habitat connectivity;**
- **ix) Mitigation of the impacts on the development arising from any predicted mining subsidence or land instability;**
- **x) For minerals workings and mineral working deposits, consideration of tip and quarry slope stability, the impacts of any dewatering activity and incorporation of appropriate mitigation in the design of tips and slopes in order to minimise any hazard to people and property.**

Proposals for substantial new minerals extraction and for the large scale treatment, recovery or disposal of waste should be accompanied by a climate change

[59] See waste context section in Chapter 2 for further information
[60] BREEAM is a design and assessment method for sustainable buildings to improve, measure and certify the social, environmental and economic sustainability of new buildings.

assessment showing how the proposals have taken into account impacts from climate change and include appropriate mitigation measures where necessary. **Part two** **Proposals for new built development should demonstrate how the development would be designed, constructed and operated in order to:** **i) minimise waste generated during construction of the development, and incorporate measures to encourage or facilitate the re-use and recovery of any waste generated during construction of the development;** **ii) Incorporate appropriate space to enable waste arising during use of the development to be sorted and stored prior to being collected for recycling or re-use;** **iii) Use sustainable construction materials where practicable, including use of alternatives to primary land-won aggregate.**
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry
Key links to other relevant policies and objectives
D04, D06, D07, D08, D09, D12 | *Objectives 9, 10, 11, 12*
Monitoring: Monitoring indicator 56 (see Appendix 3)

Policy Justification

9.94 Minerals and waste developments can be large in scale and sometimes give rise to significant impacts. The fact that minerals can only be worked where they occur also means that development sometimes needs to take place in sensitive locations. They can also be energy intensive, as a result of transport requirements and the operational processes involved. Careful design and a comprehensive approach to minimisation and mitigation of impacts can help support developments that would otherwise be unacceptable, as well as helping to reduce overall adverse impacts. Incorporation of sustainable design measures such as sustainable urban drainage systems, water consumption efficiency measures, use of sustainable transport modes such as conveyors and pipelines to move minerals within and between sites can all help conserve natural resources and reduce pollution.

9.95 Particular design considerations sometimes apply to quarries and mining waste tips. In particular, there is a need to ensure that quarry faces and any waste tips are designed so as to ensure the stability of slopes, in order to help ensure public safety as well as that of employees. It is therefore important that proposals for new mineral working and/or the construction of mining waste tips are supported by information in relation to any potential hazard to people and property, assess the significance and potential hazard and identify any features which could adversely affect the stability of the working to enable basic quarry design to be undertaken. In some cases extraction of mineral, particularly aggregate, can involve pumping in order to reduce local groundwater levels to facilitate access to the deposit. In most cases any impacts are likely to be confined to the near vicinity of the quarry site. However, there may be circumstances where there is potential for more significant effects and in these cases it is particularly important that proposals include an adequate assessment of potential effects and, where necessary, that appropriate mitigation and monitoring are provided.

9.96 Some parts of the area are likely to be at greater potential risk of land instability as a result of ground subsidence. Instability arising from the presence of former mine workings is addressed in Policy D13. In the Ripon area there is a history of ground subsidence as a result of the dissolution of gypsum deposits underlying parts of the

City and adjacent areas. More information about this can be found in the Harrogate Local Plan (Saved policies). Where new built waste or ancillary infrastructure is proposed in areas that may be at risk, advice should be sought from relevant specialists about any additional design measures that may be required. Additionally, minerals or waste development that could lead to significant impacts on groundwater movements in this area may require more detailed assessment, as these may have potential to impact on subsidence.

9.97 National planning policy gives high priority to the achievement of high design standards as an important element of sustainable development. With regard to waste, it seeks the incorporation of provision for waste management in the design of other forms of development, as well as the use of design measures to secure that waste arising from construction and operation of development is handled to maximise reuse and recovery opportunities and that the need for off-site disposal is minimised. Sustainable use of materials in new development and repair and refurbishment provides opportunities to help conserve natural resources and move waste up the hierarchy and is therefore important in delivering both minerals and waste planning objectives. Sustainable design of buildings can also help address energy consumption through the provision of passive heating and cooling. Whilst many built structures associated with minerals and waste development are specialised structures, where they fall within the scope of the BREEAM sustainability criteria or the equivalent CEEQUAL[61] rating criteria for civil engineering and infrastructure works then proposals should seek to meet a minimum 'Very Good' standard. Increased energy efficiency can also be secured through ensuring that, where practicable, proposals involving the generation of energy from waste are located where heat output from the facility can be utilised, as this is often more efficient than power generation.

9.98 Planning has an important role in delivering sustainable development through the need to mitigate and adapt to climate change and helping the country move towards a low carbon economy. This includes working towards a radical reduction in greenhouse gas emissions, minimising vulnerability and creating resilience to climate change impacts (such as increased flood risk), supporting the delivery of renewable and low carbon energy and associated infrastructure. Where practicable, developers should incorporate measures to ensure that development (other than short term development) is resilient to the predicted impacts of climate change. Proposals for new mineral extraction at a rate in excess of 75,000 tonnes per annum and for the treatment, recovery or disposal of more than 75,000 tonnes per annum of waste should be accompanied by an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors.

9.99 Within the City of York and the North York Moors National Park the relevant planning authority has responsibility for all forms of development proposals, not just minerals and waste. Within the NYCC area many forms of development are the responsibility of the District and Borough Councils. The incorporation of measures to help ensure the minimisation of waste and the appropriate use of materials in built development is necessary to help make development more sustainable. Proposals for all forms of development, other than householder development, should therefore include information on how waste will be minimised, recycled or reused where relevant as part of the proposals, how alternatives to primary minerals may be able to substitute for primary minerals in any built development or engineering works, and incorporate space in designs to help facilitate the sorting and storing of waste arising during the

[61] CEEQUAL is a sustainability rating and assessment scheme for civil engineering and infrastructure projects, similar to the BREEAM rating system for buildings.

operational life of the development, in order to contribute to the sustainable management of waste.

Sustainability Appraisal

It is considered that this policy would have an overall positive effect on achieving sustainable design, construction and operation of developments. The policy performs positively against most SA objectives, particularly those relating to air quality, climate change and flooding. Some areas of uncertainty have been highlighted including in relation to objective 12 (economic growth) as the costs associated with developing a site are likely to increase given the requirement for high standards of sustainable design and construction and additional mitigation where required. Also, part 2 of the policy requires additional land for the sorting and storage of waste arising through construction. These additional costs would be balanced with the gains that are likely to accrue through low running costs due to the energy efficiency of any development and cost reduction through re-using resources. However, this will vary depending on the site. Uncertainty/minor negative impacts have also been recorded in relation to the historic environment and landscape objectives. These impacts relate to only one element of the policy: the provision of space for the sorting and storage of waste prior to collection. It is also considered that minor negative amenity impacts may result depending on the location and design of the sorting and storage site.

Recommendations:
This policy is largely very positive and no mitigation is proposed. This policy could however be further strengthened by adding a requirement to achieve certification via an engineering quality mark such as the CEEQUAL[62] environmental assessment scheme for engineered structures that fall outside of BREEAM (such as pipelines).

Q04. Ref D11

Do you support the preferred policy approach? If not how should it be changed and why?

Protection of agricultural land and soils

9.100 The agricultural economy is very important within the Plan area, which is predominantly rural in character. It is therefore also important that, so far as possible, good quality agricultural land and soils are protected from impacts from minerals and waste development.

Policy D12 - Protection of agricultural land and soils

Best and Most Versatile agricultural land will be protected from unnecessary and irreversible loss. Where development of best and most versatile agricultural land is justified, taking into account the requirements of relevant strategic policies in the Plan, proposals should specify the measures to be taken to ensure that any soils requiring removal as part of the development are retained and conserved on site in order to maintain their longer term potential for agricultural production.

Reclamation proposals for minerals and waste development on best and most versatile land should, where practicable, include provision for the restoration of land to best and most versatile quality and will be subject to aftercare requirements to ensure that a high standard can be achieved.

[62] See http://www.ceequal.com/about.html

Soils which have a benefit other than their value for agriculture should, where practical, be retained for incorporation into site restoration.	
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry	
Key links to other relevant policies and objectives	
D06, D10	*Objectives 9, 10, 11, 12*
Monitoring: Monitoring indicator 57 (see Appendix 3)	

Policy Justification

9.101 The Joint Plan area contains very large areas of land in use for agriculture, particularly within the NYCC area. A substantial amount of this land, particularly in the lower lying areas, is of best and most versatile quality (i.e. it meets the requirements for classification as Grades, 1, 2 or 3a quality in the Defra agricultural land classification system). National planning policy requires that local planning authorities should take into account the economic and other benefits of best and most versatile agricultural land and that, where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be used in preference to that of higher quality.

9.102 Whilst it is unlikely that there will be a need for development of substantial areas of agricultural land for waste management purposes during the plan period, the nature of mineral working means that, in the large majority of cases, disturbance of agricultural land is involved. There is a relatively close association between areas of high quality agricultural land and minerals resources, for example in the Vales of Mowbray, York and Pickering and in Selby District. In order to meet future needs for minerals it is expected that development of agricultural land will be necessary and, as a result of the wide range of other constraints that apply in identifying suitable locations for mineral working, working in areas of best and most versatile land may also be required.

9.103 Where disturbance of agricultural land is justified, particularly best and most versatile land, it will be important to ensure that soils are stripped, handled, stored and conserved at the site in a manner which helps maintain their longer term potential. This will allow their eventual reuse to recreate land of best and most versatile quality or, in some cases, to enhance the quality of land of previously lower quality. Where practicable, soils removed to allow minerals extraction should be directly replaced as part of progressive restoration of the site. Where this is not practicable, soils can be stored in screening mounds as part of landscaping proposals. In all cases it is important to avoid repeated handling of soils as this can result in a progressive degradation in quality. It is also important to ensure that soils are only stripped, handled and replaced when in a relatively dry condition, to help prevent damage to the soil structure. Where permission is granted for development which involves stripping, handling or replacement of soil, conditions will be attached to ensure best practice in the interests of protecting the soil resource. Short term relaxations of usual noise limits may be incorporated in any permission to allow short term particularly noisy activities such as soil stripping and bund formation.

9.104 Where reclamation of mineral workings to agriculture is proposed, an aftercare period will be required (usually for 5 years) in order to ensure that the site is capable of beneficial afteruse for agriculture and this will also be a requirement of conditions imposed on any permission.

9.105 In some cases, soils may have particular qualities which mean they are important for biodiversity, even if they are not suitable for formation of best and most versatile

agricultural land. Such soils are also a valuable resource and should be retained and used effectively as part of site restoration in order to ensure that their long term value is preserved.

Sustainability Appraisal

This policy will help towards the sustainable conservation of our most important soil resources. It performs positively against most SA objectives, particularly those relating to protecting soils and land, adapting to climate change, protecting landscapes and supporting a changing population's needs. While some mixed outcomes may be expected in the long term when the benefits of low level quarry restoration are considered (i.e. for the biodiversity, recreation and health objectives) these are minor exceptions to a broadly very positive assessment. However, the policy applies only to best and most versatile land, which limits its potential in relation to some SA objectives (e.g. biodiversity, landscape). Recommendations: To strengthen the policy further additional wording could be added akin to 'Soils which have a benefit other than their value for agriculture should, where practical, be retained for incorporation into site restoration'

Q04. Ref D12

Do you support the preferred policy approach? If not how should it be changed and why?

Coal Mining Legacy

9.106 An issue associated with coal mining is the legacy of large numbers of disused mines in the Plan area. Across the whole of North Yorkshire (including the two National Parks) there are approximately 13,500 recorded mine entries. These can give rise to land stability issues and other hazards.

9.107 It is the responsibility of the Coal Authority to map and monitor old and disused mines and also highlight the public safety hazards and risk associated with them, but the Joint Plan authorities, and the District and Borough Councils in the NYCC area, must take them into consideration when dealing with planning applications and development proposals.

Policy D13 - Consideration of applications in Development High Risk Areas	
Proposals for non-exempt development in Development High Risk Areas identified by the Coal Authority should be accompanied by a Coal Mining Risk Assessment and where necessary incorporate suitable mitigation measures in relation to land stability. Permission will be granted where it can be demonstrated, through the Coal Mining Risk Assessment, that the development will not be at unacceptable risk.	
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry and The Coal Authority	
Key links to other relevant policies and objectives	
D02, D10, D11	*Objectives 9, 10*
Monitoring: Monitoring indicator 58 (see Appendix 3)	

Policy Justification

9.108 National panning policy and guidance indicates that Planning Authorities should be concerned about land stability as failure to deal with the issues could cause harm to human health, local property and associated infrastructure and the wider environment. The planning system has an important role in considering land stability by:

- Minimising the risk and effects of land stability on property, infrastructure and the public.
- Helping ensure that various types of development should not be placed in unstable locations without various precautions, and
- Bringing unstable land, wherever possible, back into productive use.

9.109 The Coal Authority has identified Development High Risk Areas (formally known as Coal Mining Development Referral areas). These are most likely to be subject to land stability and other public safety hazards associated with old mine entries. Within the Joint Plan area they occur mainly within Selby District and more limited areas in the western part of the Plan area. Low Risk Development Areas are more extensive.

9.110 Within Development High Risk Areas the Coal Authority will expect all new development proposals that require planning permission, except certain types of development that are exempt, to be accompanied by a Coal Mining Risk Assessment when submitted to the relevant local planning authority. Proposals in Development High Risk Areas for the types of development identified on the list of exemptions below, as well as proposals in Development Low Risk Areas, will not require a Coal Mining Risk Assessment but the Coal Authority's standing advice will apply and the local planning authority will include an informative note within the decision notice when granting planning permission.

9.111 The exemption list is divided into two parts. The first part is based on type of application and the second on the nature of the development proposed. Proposals only need to meet a criterion on one of the lists in order to be exempt.

9.112 Exemptions based on type of application:

- Reserved matters/reserved details, approval of matters specified in conditions,
- Householder development,
- Extension of time,
- Change of use,
- Variation or removal of condition,
- Heritage consents, (listed building or conservation areas),
- Advertisement consents,
- Lawful development certificates,
- Prior notification, (any type),
- Hazardous substances consent,
- Tree or hedgerow works, (TPO or in conservation area),

9.113 Exemptions based on nature of development:

- Change of use, (land or buildings) – where no other built development is proposed,
- Temporary structures with no ground works,
- Means of enclosure,
- Street type furniture,
- Alterations to existing non-residential buildings that create no new floor space,
- Non-commercial private/domestic stables.

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Sustainability Appraisal

There are unlikely to be widespread effects as a result of this policy, however, there are some small scale positive effects on soil / land, climate change adaptation, health and wellbeing, flood risk and meeting the needs of the population. This is because the policy is likely to ensure that development is less prone to land instability impacts.

Recommendations:
No further mitigation is proposed.

Q04. Ref D13

Do you support the preferred policy approach? If not how should it be changed and why?

Chapter 10: Introduction to Site Allocations

10.1 In order to help support delivery of the policies in the Plan, a range of sites proposed to be allocated are identified in Appendix 1. These are sites which have been submitted to the Authorities for consideration for allocation during preparation of the Plan and which have been considered suitable in principle for the forms of development proposed following application of a site selection process including sustainability appraisal. In some cases, at this 'Preferred Options' stage of preparing the Plan, the view reached is a preliminary one pending further clarification or assessment. In all cases, planning permission would need to be granted, following submission and consideration of a detailed planning application, before any development of the site for the proposed use/s could take place.

10.2 Appendix 1 also includes information on sites submitted for consideration but which it is proposed should be discounted (i.e. not allocated in the Plan).

10.3 More information on the approach to the identification of sites for allocation is provided in the introduction to Appendix 1.

With reference to the sites proposed to be allocated or discounted, contained in Appendix 1, please tell us if you have any views in relation to:

Q14) The suitability or otherwise of a site for allocation (with reasons)

Q15) Whether we have identified the right key issues relevant to the site

Q16) Whether we have identified the right key mitigation requirements for the site

Note: when providing a response relating to a specific site please ensure the site reference number is included with the relevant comments.

Appendices

The following appendices have been prepared to accompany the main Preferred Options consultation document. Due to their size, the appendices are presented separately from this main document.

APPENDIX 1 - PREFERRED AND DISCOUNTED SITES

APPENDIX 2 - SITES PROPOSED FOR SAFEGUARDING

APPENDIX 3 - MONITORING FRAMEWORK

APPENDIX 4 - SAVED POLICIES PROPOSED TO BE REPLACED BY PREFERRED OPTIONS POLICIES

Glossary

Term	Description
Aggregates	Sand and gravel, crushed rock and other bulk materials used in the construction industry for purposes such as the making of concrete, mortar, asphalt or for roadstone, drainage or bulk filling.
Agricultural waste	Includes a variety of substances such as pesticides containers, oil and silage wrap, as well as slurry which result from activities including horticulture, fruit growing, dairy farming, livestock breeding, seed growing, grazing and nurseries.
Airfield (Aerodrome) Safeguarding	Aerodromes need to take measures necessary to ensure safety of aircraft while flying in the vicinity of an aerodrome. Planning applications should meet certain criteria relating to height and location of proposed development to the aerodrome. Any proposed development with bird attractant properties within 13km of an aerodrome need to be consulted upon.
Air Quality Management Areas (AQMA)	Locations where national targets for air quality are not being met. Each local authority is responsible for measuring their air quality and trying to predict how it may change over several years. The aim of the review is to make sure that the national air quality objectives will be achieved across the UK by the relevant deadlines. These objectives have been put in place to protect people's health and the environment. If objectives are not achieved an AQMA with an accompanying plan is produced in order to improve air quality.
Anaerobic digestion	Organic matter broken down by bacteria in the absence of air, producing a gas (methane) and solid (digestate). The by-products can be useful, for example biogas can be used in a furnace and digestates can be re-used on farms as a fertiliser.
Area of Outstanding Natural Beauty AONB	Area designated under the National Parks and Access to the Countryside Act 1949 where the primary purpose is the conservation and enhancement of natural beauty including flora, fauna, geology and landscape. Each AONB has a Management Plan.
Appropriate Assessment	Process for assessing impacts on European sites, habitats or species. It is a decision making tool.
Aquifers	An aquifer is an underground layer of water-bearing permeable rock or unconsolidated materials (gravel, sand, or silt) from which groundwater can be extracted via a well.
Best and Most Versatile Agricultural Land (BMVAL)	Defined as Grades 1, 2 and 3a by Agricultural Land Classification methodology. BMVAL is the land which is most flexible, productive and effective in response to inputs and which can best deliver future crops for food and non-food uses.
Biodegradable waste	Includes food waste, garden waste and cardboards which can decompose without any assistance.
Biodiversity	Simply means biological diversity. It is the degree of variation

	amongst living organisms within a given area.
Biodiversity Action Plan	Produced in response to UN Convention on Biological Diversity (1992) and lists priority habitats and species.
Borrow pits	Site where mineral (often aggregate) is excavated specifically for a construction project nearby.
British Geological Survey (BGS)	The BGS provides geological maps and advice to the public, local authorities, academics and industry.
Brownfield site	Land which has been previously developed, excluding mineral workings or other temporary uses.
Building stone	Hard rock types suitable for use directly for construction in the form of walling, roofing, flagstones or for ornamental purposes. In the Plan area the principle rock types used as building stone include Carboniferous sandstones, Permian dolomitic limestones and Jurassic limestones and sandstones.
Carbon Capture and Storage (CCS)	Involves capturing carbon dioxide, either before or after burning, transporting it in pipelines and permanently storing it underground in suitable geological formations.
Climate change	Is a change in the statistical distribution of weather over periods of time that range from decades to millions of years.
Coal bed methane	Extracted by drilling into unmined coal seams to release the gas.
Coal mine methane	Extraction of methane from active and abandoned coal mines.
Coal mining legacy	Disused mines which give rise to land stability issues and other hazards. The Coal Authority map and monitor the mines and highlight public safety hazards and risk associated with them.
Coal mining risk assessment	Needs to be carried out by applicant in Development High Risk Areas and submitted alongside a planning application.
Colliery spoil	By product of coal mining, can be used as secondary aggregate.
Co-location	Having complementary industries or facilities sharing the same area of land.
Commercial and industrial waste (C&I)	Produced by a range of sectors which can be separated into commercial groups (including Retail & Wholesale, Public Services and other services) and industrial groups (including food, drink & tobacco, chemical/non-metallic minerals, power and utilities, metal manufacturing, machinery and equipment and textiles, wood and paper publishing).
Committed sites	Sites which have been submitted for consideration as preferred sites during preparation of the Plan, but have since received planning permission.
Composting	Aerobic processing of biologically degradable organic wastes to produce an end product of compost.

Community Infrastructure Levy (CIL)	A new levy that local authorities in England and Wales can choose to charge on new developments in their area. The charges are based on the size and type of the new development. The money raised from the community infrastructure levy can be used to support development by funding infrastructure that the council, local community and neighbourhoods want, like new or safer road schemes, park improvements or a new health center.
Conservation Areas	Those areas which represent 'an area of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance under the Planning (Listed Buildings and Conservation Areas) Act 1990'. Also includes Nature Conservation Areas.
Construction, demolition and excavation waste (CDEW)	Waste which arises from activities such as construction, refurbishment, demolition or excavation. It includes items such as plasterboard, bricks, soils, minerals, glass, metals and tiles.
Conventional hydrocarbons	Oil and gas where the reservoir is in porous rock such as sandstone or limestone and can be extracted using traditional drilling techniques.
Crushed rock	Hard rock (such as limestone) which has been quarried, fragmented and graded for use as aggregate.
Designated heritage asset	A World Heritage Site, Scheduled monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation.
Derelict land	Land so damaged by development that it is incapable of beneficial use without treatment.
Development High Risk Areas (previously Coal Mining Development Referral Areas)	Identified by the Coal Authority mining areas most likely to be subject to land stability and other public safety hazards.
Ecology	The study of living organisms in relation to their surroundings.
Ecosystems services	Can be simply described as the benefits people obtain from ecosystems. These include: provisioning services (food and water); regulating services (flood and disease control); cultural services (such as spiritual and cultural benefits); and supporting services (such as nutrient cycling that maintains conditions for life on Earth).
Energy from waste (EfW)	The conversion of waste into a useable form of energy, often electricity and/or heat.
Environmental assets	Naturally occurring entities that provides environmental "functions" or services.
Environmental Impact	Formal process used to predict the environmental consequences

Assessment	(positive and negative) of a plan, policy, program or project prior to moving forward with the proposal.
Exception Test for flood risk	This is undertaken for locations where the sequential test alone cannot deliver acceptable locations and where development is necessary for social or economic reasons.
Flood alleviation	Measures put in place to lower or eliminate the risk of flooding in developed areas.
Flood Zones	These Flood Zones refer to the probability of river and sea flooding, ignoring the presence of defences, and are classified into different categories. The Environment Agency has a map of the different flood zones on their website.
Furnace Bottom Ash	Is the coarse ash fraction produced by coal-fired power stations when pulverized fuel is burned at high temperatures and pressures. It has similar chemical properties to PFA, consisting predominantly of oxides of silica, aluminium and iron, but has a sand-like gritty texture and can be used as secondary aggregate.
Gasification	A chemical or heat process to convert a waste to a gaseous form of energy.
Geodiversity	The variety of rocks, minerals, fossils, soils, landforms and natural processes.
Geodiversity Action Plan	Used for the conservation and enhancement of geodiversity across an area or region.
Green Belt	Specially designated area of countryside protected from most forms of development in order to stop urban sprawl and the coalescence of settlements, preserve the character of existing settlements and encourage development to locate within existing built up areas. Mineral extraction is not inappropriate in the Green Belt provided it preserves openness and does not conflict with the purposes of including land in the Green Belt.
Green infrastructure	'Green infrastructure is a network of multi-functional green space, both new and existing, both rural and urban, which supports the natural and ecological processes and is integral to the health and quality of life of sustainable communities. Green Infrastructure includes parks, open spaces, playing fields, woodlands, allotments and private gardens.
Groundwater Source Protection Zones	Protection zones for groundwater supplies such as wells, boreholes and springs used for public drinking water supply. Displayed on maps and used to help prevent contamination of the water.
Groundwater	Is the water located beneath Earth's surface in soil pore spaces and in the fractures in rock formations. A unit of rock or an unconsolidated deposit is called an aquifer when it can yield a usable quantity of water.

Gypsum	Gypsum is a product of the evaporation of seawater and is used mainly in the manufacturing of plaster, plasterboard and cement. Synthetic gypsum is produced at power stations as a by-product of the process of flue gas desulphurisation.
Habitats Regulations Assessment (HRA)	Is founded in European legislation and government regulations which introduced a need to carry out Habitat Regulations Assessments (and the associated appropriate assessment) for any plans or projects which may affect European sites of significance (Natura 2000 sites).
Hazardous waste	Waste that may case particular harm to human health or the environment.
Heritage asset	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).
Historic environment	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.
Historic environment record	Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.
Historic Parks & Gardens	The Register of historic parks and gardens of special historic interest in England is a record of nationally significant historic parks and gardens managed by English Heritage. As with listed buildings they are graded as I, II* or II. Local authorities and County Gardens Trusts may have local registers or local lists of historic parks and gardens of local significance.
Hydraulic fracturing (fracking)	Fracking is the fracturing of rock by injection of a pressurized liquid in order to extract oil or gas.
Incineration with energy recovery	Burning of waste in an incinerator and using the energy produced as heat.
Landbanks	A landbank is a stock of land with planning permissions for the winning and working of minerals, usually expressed in terms of the amount of mineral that can be recovered from the permitted area. A landbank is also defined on the basis of assumptions about annual production rates.
Landfill	Disposal of waste into the land. Usually involves the infill of pre-existing voids. Landraise involves the disposal of waste where there is no pre-existing void.
Landscape	An area, as perceived by people, the character of which is the result of the action and interaction of natural and/or human factors.

Landscape character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Landscape character assessment (LCA)	The process of identifying and describing variation in the character of the landscape, and using this information to assist in managing change. The assessment seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape Character Assessment (also shortened to LCA).
Landscape strategy	The overall vision and objectives for what the landscape should be like in the future, and what is thought to be desirable for a particular site, landscape type or area as a whole, usually expressed in formally adopted plans and programmes or related documents.
Listed Buildings	Are buildings that have been placed on the Statutory List of Buildings of Special Architectural or Historic Interest, under the Planning (Listed Buildings and Conservation Areas) Act 1990. A listed building may not be demolished, extended or altered without special permission from the local planning authority.
Local Aggregates Assessment (LAA)	An annual assessment, prepared by mineral planning authorities, of aggregate minerals supply requirements in a planning area or areas.
Local Authority Collected Waste (LACW)	Household waste plus some similar waste collected and managed by local authorities.
Local Enterprise Partnership (LEP)	Are locally-owned partnerships between local authorities and businesses. They aim to determine local economic priorities and undertake activities to drive economic growth and create jobs.
Low level (non-nuclear) radioactive waste (LLRW)	Waste, not derived from the nuclear industry and having a radioactive content not exceeding four gigabecquerels per tonne (GBq/te) of alpha or 12 GBq/te of beta/gamma activity.
Local Nature Partnership	Partnerships of a broad range of local organisations, businesses and people who aim to manage and bring about improvements in their local natural environment.
Major Development	Major development as defined by the Town and Country Planning (Development Management Procedure) (England) Order 2010 as Development involving any one or more of the following: (a) the winning and working of minerals or the use of land for mineral-working deposits; (b) waste development; (c) the provision of dwelling houses where — (i) the number of dwelling houses to be provided is 10 or more; or (ii) the development is to be carried out on a site having an area of 0.5 hectares or more and it is not known whether the development falls within sub-paragraph (c)(i); (d) the provision of a building or buildings where the floor space to

	be created by the development is 1,000 square metres or more; or (e) development carried out on a site having an area of 1 hectare or more. Major Development in the context of the Major Development Test (see below) is not defined.
Major development test	The NPPF states that planning permission should be refused for major developments in National Parks and AONBs except in exceptional circumstances and where it can be demonstrated they are in the public interest. These applications should include assessment of: - The need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy. - The cost and scope for having the development outside the designated area, or meeting the need in another way - Any detrimental effect on the environment, the landscape and recreational opportunities, and extent to which that could be moderated. Major development in the context of the major development test is not defined and is determined on a case by case basis.
Managing Landscape Change Project	An environmental evidence base which assesses environmental sensitivities and capacity in North Yorkshire.
Mechanical biological treatment	Involves processing residual waste by a combination of both mechanical and biological treatment methods.
Mechanical recovery facility (MRF)	Actively alters the composition of waste in order to produce an end product that can be utilised.
Mineral and Waste Joint Plan (MWJP)	Is the planning policy document which will set out a local basis for minerals and waste planning for the area comprising North Yorkshire, City of York and North York Moors National park planning authority areas. Forms part of the statutory Development Plan.
Mineral consultation areas (MCAs)	An area identified in order to ensure consultation between the relevant minerals planning authority and lower tier planning authority areas before the determination of non-mineral applications.
Mineral safeguarding areas (MSAs)	Areas defined by mineral planning authorities to protect potentially economic resources of minerals from other forms of development which may prevent future extraction of the mineral.
Monitoring	A report containing information on how plan production is progressing and once the Plan is adopted the extent to which policies set out in the Plan being achieved.
Municipal waste	Comprises mainly household and some other waste for which the waste collection and disposal authorities have responsibility. Now incorporated into LACW, which includes similar C&I waste

	collected by local authorities.
Municipal Waste Management Strategy	Strategy produced by waste management authorities which outlines targets for dealing with municipal waste within their area.
National Park	Areas designated to conserve and enhance the natural beauty, wildlife and cultural heritage of the area; and to promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public. Two National Parks are located within North Yorkshire: the North York Moors National Park and the Yorkshire Dales National Park.
National Planning Policy Framework (NPPF)	Simplified planning document which acts as guidance for local planning authorities and decision-takers, both in drawing up plans and making decisions about planning applications.
National Planning Practice Guide (NPPG)	Supporting information to be used in conjunction with the NPPF.
Naturally Occurring Radioactive Material (NORM)	Found everywhere in low concentrations, can be released during mineral extraction and processing when it is concentrated and becomes a waste.
Neighbourhood Plan	Neighbourhood planning gives communities direct power to develop a shared vision for their neighbourhood and shape the development and growth of their local area.
Oil and Gas Authority	Oil and gas regulator in the UK
Petroleum exploration and Development Licence (PEDL)	Since 195 a PEDLs have been issued to cover the three main stages of petroleum activity which are exploration, appraisal and development. The licence enables the holder to undertake seismic investigations, drill wells and develop discoveries.
Potash	There are various forms of potassium bearing minerals which can be mined for potash including sylvinite, polyhalite and carnalite. Potash is mainly used as a fertiliser and rock salt may occur in association with potash and this is used to grit the roads in winter. It is an underground mineral.
Power station ash	Ash produced as a by-product by coal fired or biomass power stations. Can sometimes be used as an alternative source of aggregate.
Proximity Principle	Dealing with waste close to where it arises.
Pulverised fuel ash	Pulverised fuel ash (pfa) is the ash resulting from the burning of pulverised coal in coal-fired electricity power stations. The ash is very fine and it is removed from the flue gases and can be used as a secondary aggregate.
Pyrolysis	The combustion of waste, at temperatures in the range of 400 – 800c, in the absence of oxygen. The result is the production of liquid, gas and char, whose after-use depends on the type of waste. The most common usage is as a fuel for energy production.

RAMSAR site	Internationally important wetlands which are treated as European sites.
Reclamation	Restoring land that was once used for mineral extraction or as a landfill, in order to return it to a condition suitable for some other beneficial use.
Registered Battlefields	Designated battlefields which are monitored by Historic England and if required put on the 'at risk' register.
Registered Parks and Gardens	Designated parks and gardens which are monitored by Historic England and if required put on the 'at risk' register.
Reserves	Mineral reserves are resources which are economically viable for extraction.
Residual waste	Waste which cannot be recycled or otherwise dealt with further up the waste hierarchy.
Safeguarding	Protection of specific resource or site from being adversely impacted by encroaching development.
Scheduled Monuments	'Scheduling' is the process through which nationally important sites and monuments are given legal protection by being placed on a 'schedule', under the Ancient Monuments and Archaeological Areas Act 1979. Scheduling is the only legal protection specifically for archaeological sites. Only deliberately created structures, features and remains can be scheduled.
Secondary/recycled aggregate	Includes materials such as waste and by-products with properties which enable them to be used as an alternative source of construction aggregate. Common examples are power station ash, spoil and recycled construction materials such as concrete and bricks.
Sequential Test	A sieving process which seeks to direct development away from areas more likely to flood.
Setting	The surroundings in which a valued area, site, building or feature is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve.
Shale gas	Gas contained within small pores in fine grained rocks which can only be extracted using certain techniques (see Hydraulic fracturing).
Silica sand	Sandstone which contains a high proportion of silica (99% SiO_2) in the form of quartz. Low levels of impurities are important as well as grain size.
Site Allocations	Identification of sites which could deliver the policies within the Local Planning document.
Sites of Importance for Nature Conservation (SINCs)	A site may qualify as a SINC due to the presence of notable species or an important habitat. SINCs form part of a wider national network of non-statutory locally valued wildlife sites and are generally administered by local authorities in partnership with

	conservation organisations. At a local level SINCs are also known as Local Geographical Sites (LGS) and Local Wildlife Sites (LWS).
Sites of Special Scientific Importance (SSSIs)	SSSIs are the country's very best wildlife and geological sites. There are over 4,000 SSSIs in England, covering around 7% of the country's land area. Over half of these sites are internationally important for their wildlife, and also designated as Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites.
Source Protection Zones	Environment Agency defined zones which include boreholes, springs and wells used for public drinking supply and so need protection from pollution.
Special Area of Conservation (SAC)	These are areas that have been given special protection under the European Union's Habitats Directive. They provide increased protection to a variety of wild animals, plants and habitats and are a vital part of global efforts to conserve the world's biodiversity.
Special Protection Area (SPA)	For rare and vulnerable birds as listed in Annex 1 to the European Union's Birds Directive.
Strategic Environmental Assessment (SEA)	The Environmental Assessment of Plans and Programmes Regulations 2004 (which transposed the SEA Directive into law in England).
Strategic Flood Risk Assessment (SFRA)	An assessment usually under taken by a local authority of group of authorities to consider flood risk and examine the risks involved in developing certain areas within the County.
Strategic Stone Study	Historic England and BGS studied historic structures, identified the stones used, then tried to identify the original source of the stone and record/map the location. The information can now be used to identify potential sources of building stone for conservation and new build and safeguard them.
Statement of Community Involvement	Produced by local authorities as part of the Planning and Compulsory Purchase Act 2004 to explain to the public how they will be involved in the preparation of local development documents.
Sustainability Appraisal (SA)	This is a formal systematic and iterative assessment of local planning policy documents during their preparation in order to assess the extent to which they encompass the aim of working towards sustainable development.
Sustainable Communities Strategy (SCS)	The SCS creates a long-term vision for an area to tackle local needs and is prepared by the Local Strategic Partnership.
Sustainable development	Is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for future generations. Delivery of sustainable development is an overarching objective of the planning system.
Sustainable Urban	SuDS are an approach to managing rainwater falling on roofs and

Drainage (SUDs)	other surfaces through a sequence of actions. The key objectives are to manage the flow rate and volume of surface runoff to reduce the risk of flooding and water pollution. SuDS also reduce pressure on the sewerage network and can improve biodiversity and local amenity.
Two tier structure	Where 2 or more Local Authorities cover the same area such as with a County Council and District Councils, each is responsible for different functions, including different aspects of planning.
Unconventional hydrocarbons	Oil or gas which cannot be extracted using traditional drilling techniques and include underground coal gasification, coal bed methane and shale gas.
Underground coal gasification	The burning of coal underground and extracting the gasification products which can be processed to provide fuel.
Vein minerals	Vein minerals are layers of ore between layers of rock and can include fluorspar, barytes and lead.
Waste hierarchy	Is a guiding theme for waste policy at all levels and places greater emphasis on the sustainable management of waste by giving preference to waste management methods towards the top of the hierarchy (such as prevention, re-use and recycling) over methods lower down the hierarchy (such as recovery and disposal).
Waste recovery	Processing waste to prevent it going to landfill. Recovery processes include incineration with energy recovery, advanced thermal treatment, anaerobic digestion and composting.
Waste Water	Water which is disposed of at domestic properties or through commercial and industrial activities.
World Heritage Sites	World Heritage Sites (WHS) are protected areas that are internationally recognised for their outstanding global value
Zero waste economy	Where material resources are re-used, recycled or recovered wherever possible, and only disposed of as the option of very last resort.