

Minerals and Waste Joint Plan



Adopted by:

North Yorkshire County Council - February 2022

North York Moors National Park Authority - March 2022

City of York Council - April 2022

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, (referred to as ‘the Authorities’), also have a duty to produce planning policies to help to 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 to 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 two National Parks, four Areas of Outstanding Natural Beauty and a Heritage Coast. Therefore it is especially important to ensure that the working of essential minerals takes place without causing harm to these and other special areas.

It is now well known that Government, commerce, 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 and 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 Authorities have therefore worked jointly to prepare this Minerals and Waste Plan, referred to as the ‘Joint Plan’, containing planning policies to help us to take decisions about matters such as where, when and how minerals and waste developments should be planned and controlled up to 31 December 2030.

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Index of Policies

Policy Policy Title

Strategic policies for minerals

M01	Broad geographical approach to supply of aggregates
M02	Provision of sand and gravel
M03	Overall distribution of sand and gravel provision
M04	Landbanks for sand and gravel
M05	Provision of crushed rock
M06	Landbanks for crushed rock
M07	Meeting concreting sand and gravel requirements
M08	Meeting building sand requirements
M09	Meeting crushed rock requirements
M10	Unallocated extensions to existing quarries
M11	Supply of alternatives to land-won primary aggregates
M12	Continuity of supply of silica sand
M13	Continuity of supply of clay
M14	Incidental working of clay in association with other minerals
M15	Continuity of supply of building stone
M16	Key spatial principles for hydrocarbon development
M17	Other spatial and locational criteria applying to hydrocarbon development
M18	Other specific criteria applying to hydrocarbons development
M19	Carbon and gas storage
M20	Deep coal and disposal of colliery spoil
M21	Shallow coal
M22	Potash, polyhalite and salt supply
M23	Supply of gypsum
M24	Supply of vein minerals
M25	Borrow pits

Strategic policies for waste

W01	Moving waste up the waste hierarchy
W02	Strategic role of the Plan area in the management of waste
W03	Meeting waste management capacity requirements - Local Authority Collected Waste
W04	Meeting waste management capacity requirements – Commercial and Industrial waste (including hazardous C&I waste)
W05	Meeting waste management capacity requirements - Construction, Demolition and Excavation waste (including hazardous CD&E waste)
W06	Managing agricultural waste
W07	Managing low level (non-nuclear industry) radioactive waste
W08	Managing waste water and sewage sludge
W09	Managing power station ash and Incinerator Bottom Ash
W10	Overall locational principles for provision of waste management 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 Safeguarded Surface mineral resources
- S02 Developments proposed within Safeguarded Surface Mineral Resource areas
- S03 Safeguarded Deep Mineral Resource areas
- S04 Waste management facility safeguarding
- S05 Transport infrastructure safeguarding
- S06 Minerals ancillary infrastructure safeguarding
- S07 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 Development affecting the 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
- D14 Air Quality
- D15 Planning Obligations

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
CEEQUAL	Civil Engineering Environmental Quality Assessment and Award
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
CD&E	Construction, Demolition and Excavation Waste
DBEIS	Department for Business, Energy and Industrial Strategy
DCLG	Department for Communities and Local Government
DECC	Department of Energy and Climate Change (Note following departmental restructuring in July 2016 oil and gas licensing now falls within the Department for Business, Energy and Industrial Strategy - DBEIS)
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
IBA	Incinerator Bottom Ash
LVIA	Landscape and Visual Impact Assessment
LCA	Landscape Character Assessment
LAA	Local Aggregate Assessment
LACW	Local Authority Collected Waste
LEP	Local Economic Partnership
LLR	Low Level (non-nuclear) Radioactive Waste
MCA	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 Transmission System
NYMNP	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 Oil and Gas Group
WDA	Waste Disposal Authority
WPA	Waste Planning Authority
WHS	World Heritage Site
YDNPA	Yorkshire Dales National Park Authority

A glossary of terms used in the Minerals and Waste Joint Plan is provided at the end of this document.

Chapter 1: Background

Timeframe and geographical scope of the Joint Plan

- 1.1 The Minerals and Waste Joint Plan will cover the period 1 January 2016 to 31 December 2030. The geographical scope of the Joint Plan is the three minerals and waste 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, referred to subsequently in this document as the 'Plan area'. Whilst a large part of the adjacent Yorkshire Dales National Park area also forms a part of the North Yorkshire sub-region, that authority is producing a separate local plan, which includes minerals and waste policies. Liaison has been maintained with the Yorkshire Dales National Park Authority during production of the respective Plans.

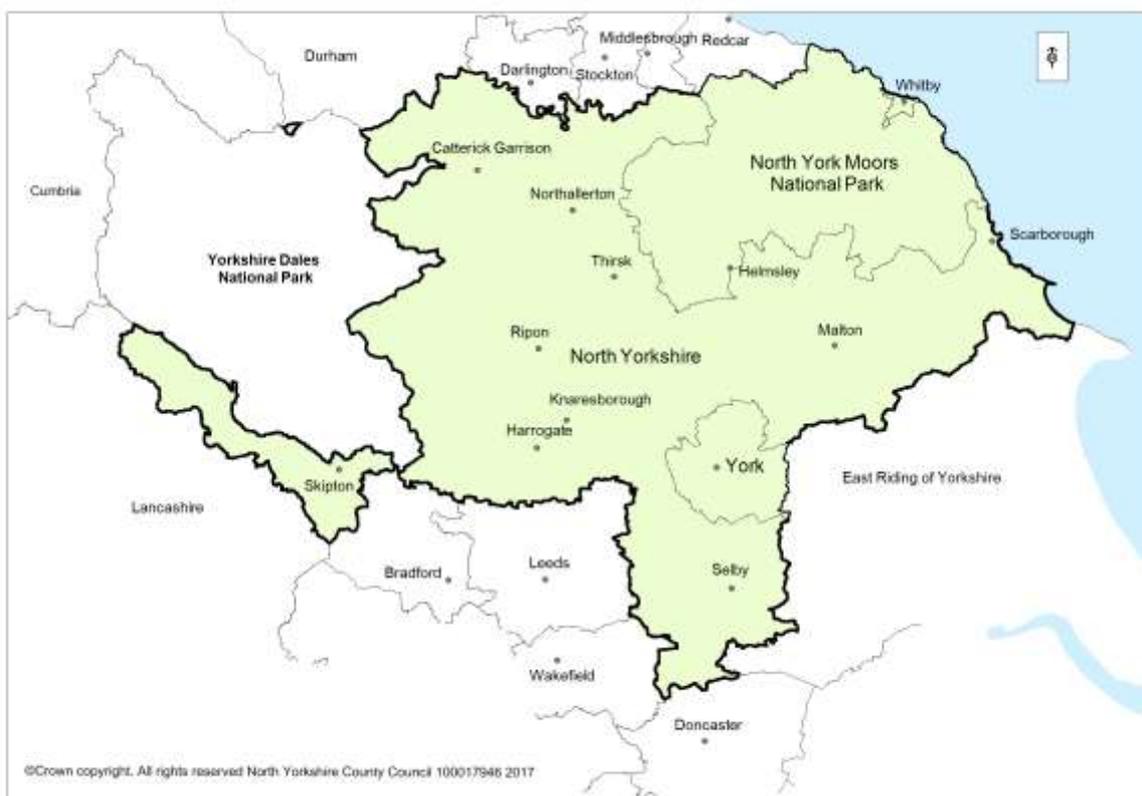


Figure 1: The Plan area

Statutory Requirement

- 1.2 Planning authorities are required, either individually or jointly with other planning authorities, to prepare a Development Plan 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 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. A map showing the boundaries of all the planning authorities in the Plan area is provided below.

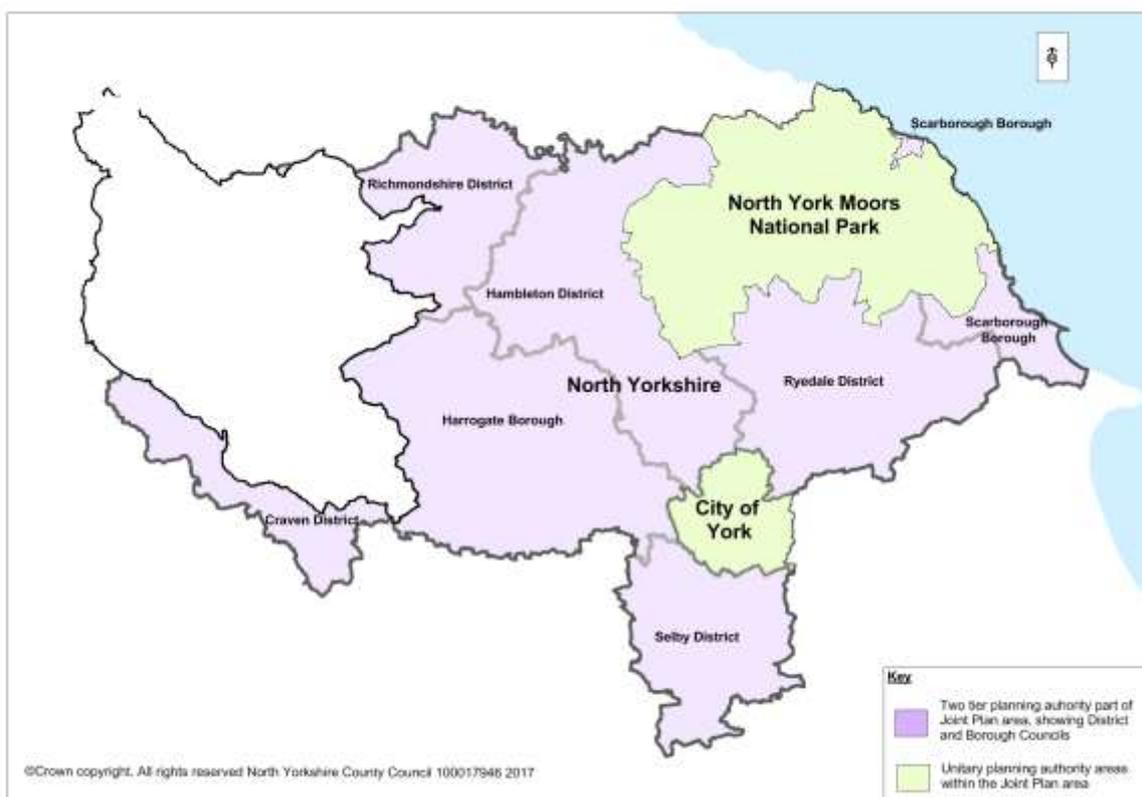


Figure 2: Planning Authority boundaries in the Plan area

Why produce a Joint Plan?

- 1.3 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. The National Planning Policy Framework (NPPF) also encourages planning authorities to consider preparing joint plans. As a result, the Authorities have decided to prepare a joint Local Plan, referred to as the Minerals and Waste Joint Plan, recognising a number of inter-relationships in the provision of minerals and the management of waste.
- 1.4 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 Joint Plan. The North York Moors National Park Authority adopted its Core Strategy and Development Policies in 2008. This contains policies on minerals and waste, which will be replaced by the Joint Plan. The National Park has commenced 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 Joint Plan, is provided in Appendix 4 for information.

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

- 1.5 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 to 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 to deal with the issues identified, and invited views on these and any other options which should be considered.

- 1.6 In addition to 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 Joint Plan and allocated sites are set out in Appendix 1.
- 1.7 A Preferred Options consultation, representing a first full draft of the Joint Plan, was undertaken in late 2015 and early 2016 and the outcome of that process has helped finalise the Joint Plan. 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 has been carried forward into the development of the Joint Plan. Details of the responses received to the main stages of consultation can be found on the Joint Plan website at www.northyorks.gov.uk/mwjointplan.

Scope and purpose of the Minerals and Waste Joint Plan

- 1.8 The main purpose of the Joint Plan is to provide guidance to developers, local communities and other interested parties on where and when minerals and waste development may be expected over the next 15 years or so, as well as how it will be managed to reduce any adverse impacts and maximise any benefits. Minerals development includes activities such as mining, quarrying and gas extraction. Waste development includes activities such as waste recycling and the treatment and disposal of waste.
- 1.9 The Joint Plan forms part of the statutory development plan and the Authorities will use it as the starting point for decisions on planning applications for development relating to these activities. Where the Joint Plan contains relevant policies, decisions will be made in accordance with the Joint Plan unless there are other material considerations, related to planning, which indicate otherwise.
- 1.10 When using the Joint Plan to help with such decisions, it must be read as a whole. Whilst the specific policies in the Joint Plan are particularly significant in setting out the key principles on which decisions will be based, the supporting text explains in more detail how the individual policies will be interpreted and applied. It will therefore be used by the planning authorities, in conjunction with the policies, to guide their approach to decision-making.
- 1.11 The Joint Plan needs to deal with a wide range of matters and set out a clear local approach on relevant issues. It also needs to meet a number of tests of 'soundness' set by Government. These require that a plan is:
 - Positively prepared - it meets identified needs for development, including needs arising outside the area where appropriate;

- Justified - it represents the most appropriate strategy for the area based on proportionate evidence;
- Effective - it is capable of being delivered, and;
- Consistent - it is generally consistent with national planning policy.

Meeting these tests inevitably constrains the scope and content of the Joint Plan and requires that a balanced approach is taken on the various issues that can arise.

- 1.12 As well as contributing to the supply of important raw materials and sources of energy, minerals and waste development can give rise to a range of adverse impacts, such as on the environment, local communities and businesses, which need to be minimised. Helping to achieve a suitable balance between these potentially conflicting objectives is a key role of the Joint Plan.
- 1.13 In this respect, an important matter addressed in the Joint Plan is the potential for a rapid rise in commercial interest in development of shale gas resources in the eastern part of North Yorkshire. This follows the recent announcement of new Government exploration and development licences in the area, which may lead to the submission of more proposals for this form of development during the lifetime of the Joint Plan.
- 1.14 Accommodating new development of this nature, whilst ensuring a high degree of protection to the environment and local communities, is a key challenge. To reflect the significance of this rapidly evolving issue, the Joint Plan sets out a comprehensive range of policies and supporting information for oil and gas that will need to be taken into account, both by developers in coming forward with proposals and by the planning authorities in taking relevant decisions. In summary, the Joint Plan provides a degree of flexibility for development to take place in suitable locations, and where it can be carried out in a way which ensures a high degree of protection to those existing qualities of the area which make it a particularly distinctive and valued place in which to live, work and visit. The planning authorities will be guided by this principle when fulfilling their planning responsibilities.

Sustainability Appraisal and Other appraisals to support the Joint Plan

- 1.15 Sustainability Appraisal of a Local Plan is a statutory requirement under the Planning and Compulsory Purchase Act 2004 and Strategic Environmental Assessment is required by European law. The two assessments have been undertaken simultaneously in relation to the Joint Plan under the term Sustainability Appraisal. The Sustainability Appraisal assesses the potential effects of the Joint Plan at each stage in relation to sustainability objectives. Where appropriate, recommendations arising from the appraisal process have been incorporated into the content of the Joint Plan. Information relating to Sustainability Appraisal is available in the Sustainability webpage: www.northyorks.gov.uk/mwsustainability.
- 1.16 Habitats Regulations Assessment, required by European law, is concerned with ensuring that the Joint Plan will not cause harm to the integrity of Special Areas of Conservation, Special Protection Areas and Ramsar sites. Each policy and site has been assessed in terms of its likely significant effects and the outcome of this process can be viewed in the Habitats Regulations Assessment report on the sustainability webpage.
- 1.17 A Strategic Flood Risk Assessment (SFRA) has also been carried out and is available as part of the evidence base for the Joint Plan.

Chapter 2: Context

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

Spatial Portrait of the Plan area

- 2.2 A detailed description of the Plan area can be found within the evidence supporting the Joint Plan, all of which can be found on the Joint Plan website at www.northyorks.gov.uk/mwevidence.
- 2.3 The 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 (NYMNP). The three authority areas form the major part of the North Yorkshire sub-region, along with the adjacent Yorkshire Dales National Park Authority area. A separate local plan, including minerals and waste issues, is being prepared by the Yorkshire Dales National Park Authority. Although the majority of the North York Moors National Park Authority area lies within North Yorkshire, a small part in the north of the National Park falls within Redcar and Cleveland Borough Council (see fig.7). The National Park Authority is the planning authority for the whole of the area of the National Park but Redcar and Cleveland Borough Council remains the Waste Management Authority for the part of the National Park within Redcar and Cleveland, with responsibility for the collection and disposal of waste.
- 2.4 The total extent of land covered by the Plan area is 6,718 square kilometres – this is a particularly large and diverse area. The NYCC area is largely rural, containing a number of small market towns and numerous villages, along with the larger urban areas of Scarborough and Harrogate. The CYC area is focussed upon the historic city of York and is mostly urban, with a rural hinterland. The NYMNP 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 There are seven District or Borough Councils within the NYCC area¹. These are all producing or updating a local plan for their area. The decisions by these Councils in respect of their own plans have implications for the wider area in terms of housing growth and economic development. In turn these provide relevant context for the policies in the Joint Plan. The area of Craven District which lies outside the Yorkshire Dales National Park (and hence falls within the Plan area - see fig 2) is partly separated from the remainder of the Plan area, in administrative terms, by the National Park. However, in functional terms (for example in relation to waste management arrangements) the area is closely linked to the remainder of the Plan area, as well as to other parts of the Leeds City Region located to the south-east.

¹ These are Craven, Hambleton, Richmondshire, Ryedale and Selby Districts and the Boroughs of Harrogate and Scarborough.

- 2.6 A total of about 829,000² people live within the Plan area. At an average of 123 people per km² it is more sparsely populated than many English counties, even taking account of relatively high population density in York. Most of these live within the NYCC area whilst 204,400 live in York and 23,200 live in the North York Moors National Park. It is forecast that the population of the Plan area will grow to around 874,300³ 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 228,900 by 2030. 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 average household size. Correspondingly high rates of housing growth are proposed in some parts of the Plan area in response to these expected changes.
- 2.7 The largest commercial and industrial sectors in the 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. However, coal mining in Selby District ceased 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 Plan area's natural and cultural heritage and environment and the presence of a substantial length of attractive coastline mean that tourism and recreation is also of importance to the local economy.
- 2.8 Unemployment in the Plan area is generally lower than the regional and national average. Employment in mining and quarrying represents around 1% of employment, although Boulby Potash Mine is the largest employer in the North York Moors National Park. Approval has recently been granted for a second polyhalite mine in the Park and this is planned to be developed within the course of the Plan period, providing substantial additional employment in this sector. Around 1,800 people work in industries related to waste in North Yorkshire.
- 2.9 The main transport links in the area run on a north-south axis, via the A1M and A19 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.
- 2.10 The 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 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 ONS 2014 mid-year estimate

3 ONS 2014 based sub-national projections

- 2.11 The North York Moors National Park was designated in 1952. 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'.
- 2.12 There are two AONBs wholly within the Plan area - Howardian Hills and Nidderdale - as well as small parts of two others, Forest of Bowland and North Pennines. In terms of national 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 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 Plan area being designated as either National Park or AONB are significant in terms of planning for minerals and waste, which are typically relatively large-scale developments of industrial character, as there is a presumption against major development in these areas.
- 2.13 As well as large areas being designated as a National Park or AONB, the Plan area contains numerous other important environmental and heritage designations. Large tracts of the 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 865km² 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 Plan area is located in the North York Moors National Park, which has around 310km², and there is around 80 km² 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 and local amenity and leisure, such as within towns and villages, on agricultural land or along road verges.
- 2.14 There is 361km² of Green Belt designated in the 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.
- 2.15 Within the 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.

- 2.16 The Plan area contains numerous opportunities for recreation, leisure and research 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.
- 2.17 Ecosystems services are the services provided by the natural environment which help to support human life. Ecosystems services provided by the 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.
- 2.18 Large parts of the lower lying areas covered by the Joint 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.
- 2.19 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 including from diesel engines and HGV traffic. As such, it is possible 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 City Council has recently adopted a Low Emissions Strategy and is developing planning guidance to reduce the emissions impact of new developments.
- 2.20 The assets referred to in the paragraphs above combine to create networks of green infrastructure across the Plan area, providing habitats for wildlife as well as opportunities for recreation.

Policy Context

National policy

- 2.21 The National Planning Policy Framework (NPPF) contains the Government's overarching policies on minerals planning. It contains a number of policies relating to specific minerals types which are considered later in the Joint Plan. The NPPF 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, whilst also making clear that minerals should be used sustainably. It 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 Plan area are aggregates, brick clay, silica sand, gypsum, salt, fluor spar, coal, gas, potash and building stone.

- 2.22 The NPPF sets out specific policies in relation to the supply of a number of types 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, at least 10 years for silica sand sites (more in some circumstances) and at least 25 years for clay sites. It also requires planning authorities to consider how to meet demand for minerals for the repair of historic assets.
- 2.23 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.
- 2.24 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'.
- 2.25 These policies have been addressed through the production of a range of evidence papers which support the Joint Plan.
- 2.26 The NPPF also places emphasis upon conserving important landscape and heritage assets by requiring that landbanks for non-energy minerals are, as far as practical, provided outside National Parks, AONBs, Scheduled Monuments and World Heritage Sites. This is relevant as a relatively large proportion of the Plan 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). The NPPF advises that inappropriate development is by definition harmful to the Green Belt and should not be approved except in very special circumstances. It also advises that minerals extraction is not considered to be inappropriate development within Green Belt, provided it preserves openness and would not conflict with the purposes of including land within it. Harm to assets, including landscape and heritage assets, relevant to the purpose of Green Belt designation equate to harm to the purposes of Green Belt designation. Green Belt policy is addressed further in Chapter 9 Development Management.
- 2.27 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.
- 2.28 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. It operates alongside the Waste Management Plan for England and National Policy Statements for Waste Water and Hazardous Waste. The new policy states that planning strategies should help to drive waste up the waste hierarchy, deliver sustainable development and resource efficiency, provide appropriate infrastructure and 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.

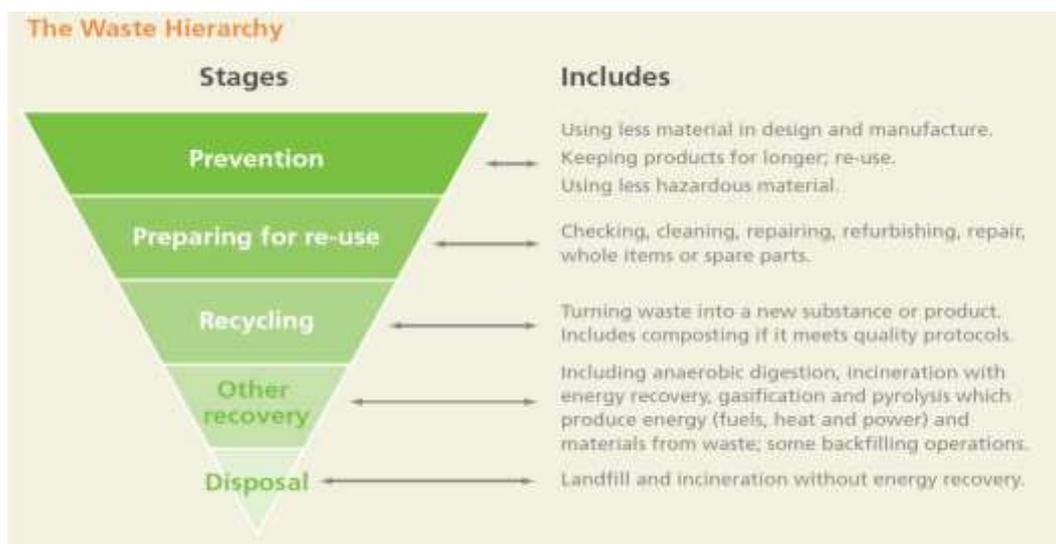


Figure 3: Waste hierarchy (Defra, Government Review of Waste Policy 2011)

- 2.29 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, they 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.
- 2.30 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.
- 2.31 In 2004 the UK implemented the EU Water Framework Directive, which sets out a range of objectives aimed at protecting and improving the ecological health of rivers, lakes, estuaries and coastal and groundwaters. The Directive places a range of obligations on developers and planning authorities to further these objectives and these have informed the content of the Joint Plan.

Local Policy and Strategies

- 2.32 A number of local policy or strategy documents provide relevant context for the Joint Plan. The key relevant local policy documents forming part of the evidence base for the Joint Plan can be viewed at www.northyorks.gov.uk/mwevidence.

Municipal Waste Management Strategies

- 2.33 The waste disposal authorities covering the Plan area (NYCC, CYC and Redcar and Cleveland Borough Council) set out the approach to management of municipal waste (now often referred to as Local Authority Collected Waste).

- 2.34 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 adopted Tees Valley Minerals and Waste Core Strategy. The most relevant strategy for the Joint Plan is therefore the joint 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.

- 2.35 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.

- 2.36 These targets are considered in more detail and in relation to current performance and future requirements in Chapter 6 of the Joint Plan.

Local Plans

- 2.37 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 planning⁴. 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.

⁴ The National Park Authority is defined as the 'sole planning authority' for the National Park in the 1995 Environment Act.

- 2.38 City of York Council officers produced a publication draft Local Plan in autumn 2014. This process however was halted by a Council resolution on 9th October 2014. In response to both the Council resolution and the changed context in terms of housing figures, officers initiated a work programme cumulating in the 'Local Plan – Preferred Sites 2016' document and the other supporting technical documents which were published for public consultation July-September 2016.
- 2.39 The 'Local Plan – Preferred Sites 2016' documents focus on additional work relating to housing and employment land need and supply. A 'Local Plan – Publication Draft' which will contain all proposed allocations and planning policies will follow in late 2016 with submission expected in May 2017. This will include a strategic approach to minerals and waste setting out the main principles for York.
- 2.40 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 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.⁵
- 2.41 NYMNPAs 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 Joint 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.
- 2.42 The development plans of local planning authorities within and around the 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 are 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 around 3,250 new houses per annum in the North Yorkshire sub-region. Housing growth is also expected to be linked to additional development for employment purposes and a range of social and economic infrastructure. In addition, major infrastructure projects, some of which are planned at a national level, such as the High Speed 2 rail line and the proposed gas-fired power station near Knottingley 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.
- 2.43 The information above nevertheless suggests that the Joint 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 Plan area will also have a

⁵ The Regional Strategy for Yorkshire and Humber (Partial Revocation) Order 2013 came into force on 22nd February 2013.

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 in Chapter 6.

Sustainable Communities Strategies

- 2.44 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:
- 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.
- 2.45 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 that '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

- 2.46 National Park Authorities must produce a National Park Management Plan setting out the vision, aims and policies for the management of the National Park over a 15 year period. 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. Although covering a 15 year period, National Park Management Plans are to be reviewed on a five yearly basis to take account of any changes in circumstances, pressures or opportunities facing the National Park. At the time of preparing the Joint Plan the North York Moors National Park Authority was in the process of carrying out its first review of the Management Plan, which will be finalised in 2017.

Strategic Economic Plan

2.47 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 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 second 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.

2.48 The southern part of the 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.

2.49 Although only a small part of the Plan area falls within the Tees Valley Local Economic Partnership area, managed by Tees Valley Unlimited, it is still important to consider the influence which economic growth from outside the Plan area may have. The Strategic Economic Plan, published May 2014, contains a number of ambitions relevant to the Joint Plan, 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

2.50 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 CO₂ 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 new climate change target was adopted by the UK Government in late 2015 as a result of the Paris agreement. A range of work is taking place alongside preparation of the Joint Plan to help ensure that relevant issues are taken into account, including a Sustainability Appraisal incorporating Strategic Flood Risk Assessment.

Evidence Base

- 2.51 Some of the key documents used in preparing the draft Joint Plan are listed below and these, along with other evidence documents are available at www.northyorks.gov.uk/mwevidence.

Minerals and Waste Joint Plan Evidence Papers

- 2.52 Each of the authorities has produced specific evidence 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. A Yorkshire and Humber Waste Position Statement has been produced jointly by all WPAs in Yorkshire and Humber to help to provide a wider evidence base for waste plans. Evidence 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

- 2.53 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 Authorities, along with the Yorkshire Dales National Park Authority, published their first Local Aggregates Assessment in March 2013. A review was carried out with updated information, including a revised approach to forecasting future demand for aggregate, leading to a revised LAA being produced in 2015. A further review and updating was carried out in 2016 and it is intended to review the LAA on an annual basis. Specific findings of the LAA are considered within the aggregate minerals sections in Chapter 5.

Marine Dredged Sand and Gravel

- 2.54 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 increase 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. 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. Marine Plans for the East Inshore and East Offshore areas were published by the Marine Management Organisation in April 2014. These recognise the significance of marine aggregates resources in the Humber dredging area. They include policies which seek to ensure that the potential of existing licensed dredging areas, as well as areas of unlicensed marine aggregate resources, are considered and where appropriate protected when other offshore development activity is proposed. For the area north of Flambrough Head, and pending finalisation of a North East Marine Plan, reference should be made to the national Marine Policy Statement, which also highlights the importance of marine aggregates in supplying the construction industry.

Minerals Safeguarding Studies

- 2.55 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 Plan area. The outcome of the work has been used to help to inform the approach to Mineral Safeguarding taken within the Plan.

Updated sand and gravel assessment

- 2.56 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 overall distribution of potential resources and has formed the basis for identifying safeguarding areas for sand and gravel, as well as assisting with identifying locations for future development.

Waste Arisings and Projections

- 2.57 The 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.
- 2.58 The work provides an assessment of likely future arisings to 31st December 2030 in relation to local authority collected waste⁶, commercial and industrial waste, construction, demolition and excavation waste, hazardous waste, agricultural waste, local level non-nuclear industry radioactive waste and waste water / sewage sludge. These projections are set within the context of varying growth scenarios. The work, which was updated in 2016, identifies the available capacity of existing waste

⁶ 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

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. Information has also been drawn from the Yorkshire and Humber Waste Position Paper, prepared jointly by waste planning authorities in the area and updated during 2016.

Sustainability Appraisal

- 2.59 The Sustainability Appraisal helps to ensure that environmental, social and economic considerations are integrated into the production of the Joint Plan. Sustainability Appraisal has shaped the content of the Joint Plan. The Sustainability Objectives used to assess the Joint Plan have been developed by taking account of the objectives of many other plans, policies and programmes which are relevant to the 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 Joint Plan in 2013, including two workshops with key stakeholders. The scoping report and other sustainability appraisal reports supporting the Joint Plan can be accessed here: www.northyorks.gov.uk/mwsustainability.

Mineral and Waste specific context

- 2.60 The purpose of this section is to provide more background to the development of the policies in the Joint Plan. It is derived mainly from information in the evidence base for the Joint 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

- 2.61 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. Figures 4 and 5 below show the overall distribution of potential minerals resources in the Plan area.

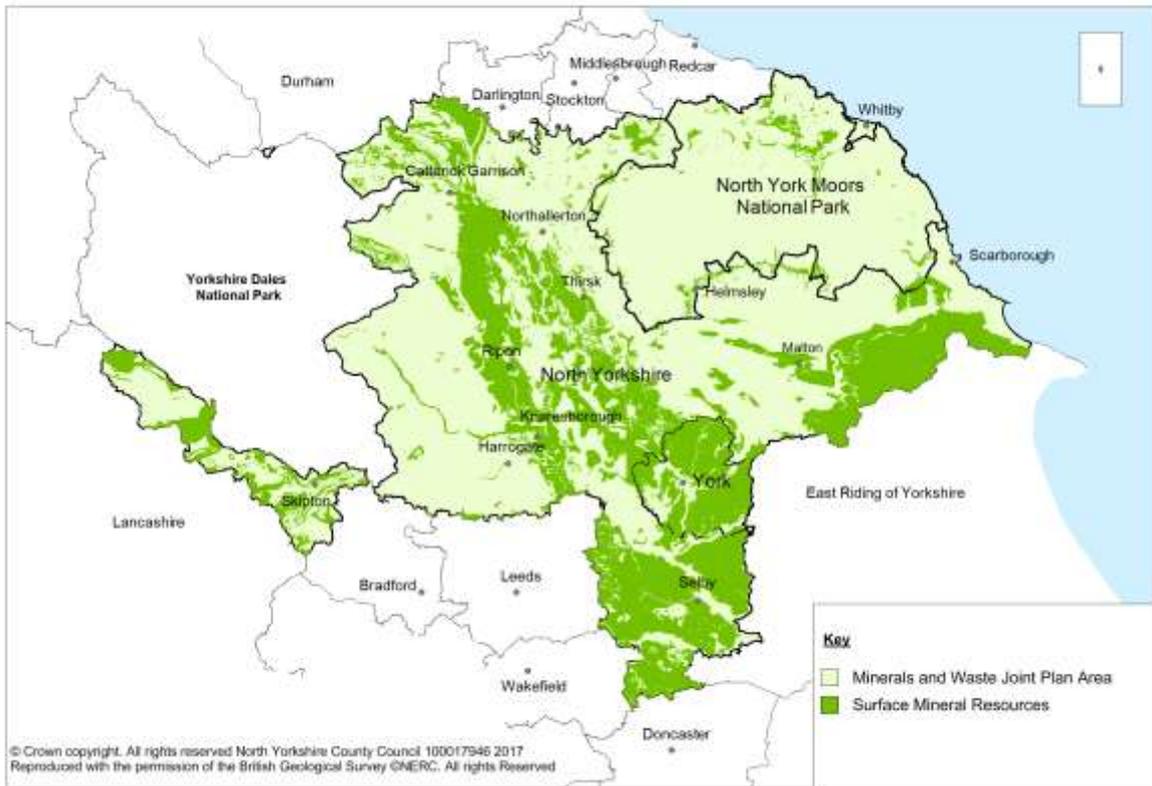


Figure 4: Distribution of surface mineral resources within the Plan area

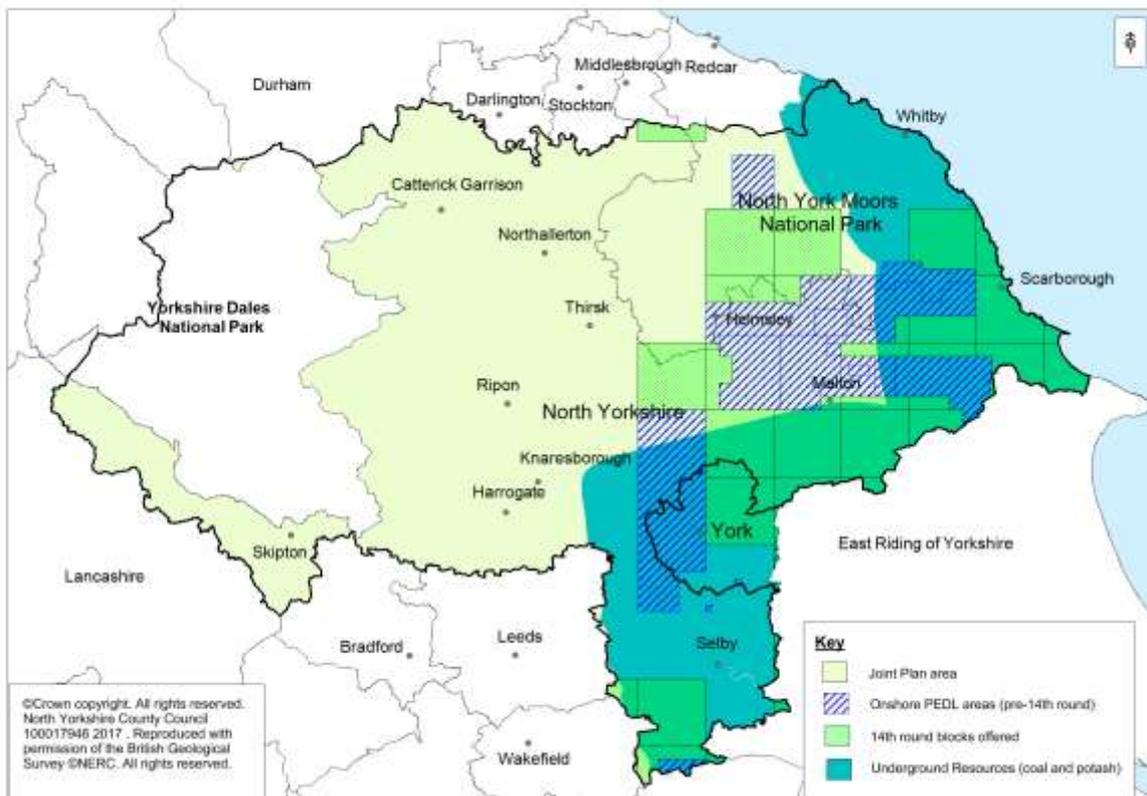


Figure 5: Distribution of underground mineral resources within the Plan area

- 2.62 Despite this relatively broad distribution of resources, there are certain areas where the quarrying industry is well-established and infrastructure exists to help to process minerals and transport them to markets. This has resulted in concentrations of working in certain parts of the 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/polyhalite mine, located in the northern part of the North York Moors National Park.
- 2.63 With over 50 working quarries, the 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 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 potash (Boulby Mine in the North York Moors National Park is the UK's only operational potash/polyhalite mine, although permission has been granted recently for a major new polyhalite mine in the Park) and silica sand, which is a scarce and nationally significant mineral worked on a relatively small scale at Burythorpe Quarry and formerly worked at Blubberhouses Quarry, where reserves still remain. 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 Eberston 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.

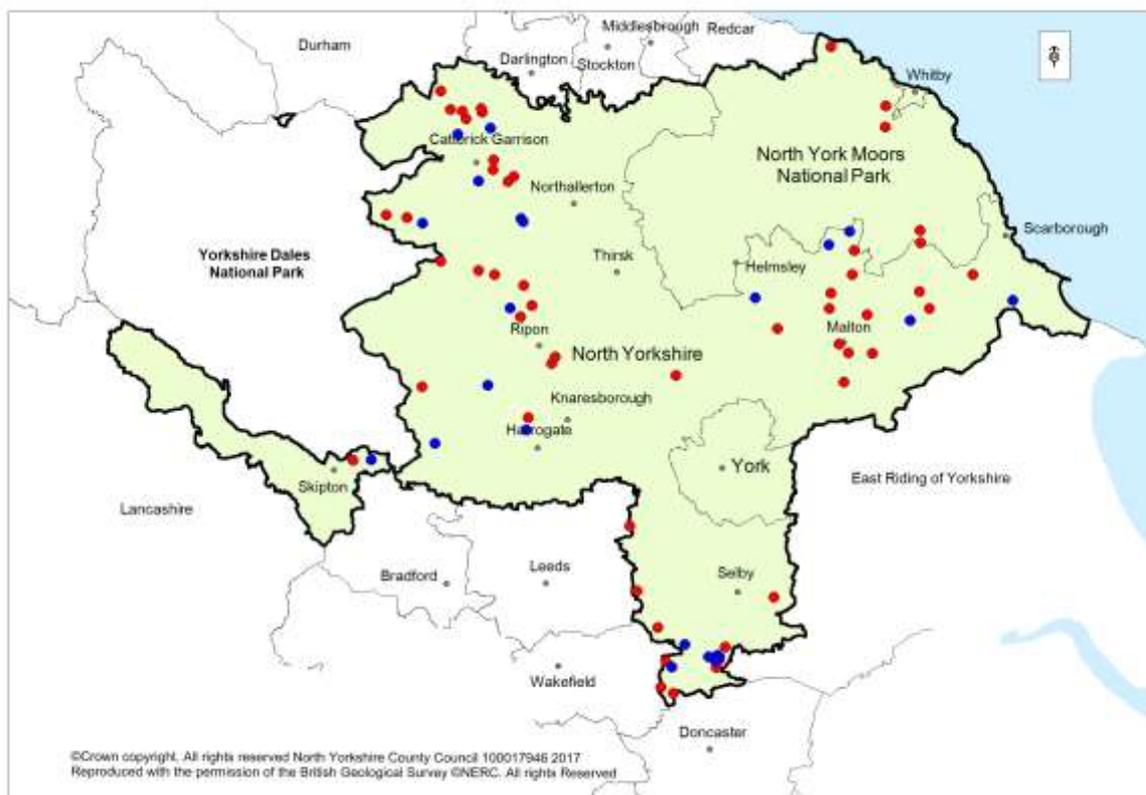


Figure 6: Distribution of active and dormant quarries in the Plan area

- 2.64 In addition to these 'primary' minerals resources of commercial significance, the Plan area is also a supplier of secondary aggregate, in the form of waste ash from power stations located in Selby District. The Plan 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. Marine aggregates constitute another potential source of aggregate but do not currently form an important element of supply in the area, although their significance may increase in future.
- 2.65 As well as quarries and mines, the Plan 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 to transport aggregate, such as rail heads and river wharves. This infrastructure is important as it helps to 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.
- 2.66 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 2014, around one-half of all the sand and gravel and approximately one-third of all crushed rock produced in the area was transported to other locations in Yorkshire and Humber or into the North East Region, mainly Durham and Teesside.
- 2.67 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 Plan area include silica sand, which has a national market 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. Clay is used mainly at local manufacturing facilities within the Plan area.
- 2.68 The overall scale of imports of minerals is relatively small compared with total consumption, although data is limited. Known imports in 2014 include aggregate from the Yorkshire Dales National Park, the North East region, Cumbria, Doncaster, the East Riding, Nottinghamshire and Sunderland, although the specific pattern and volume of movements is likely to vary year-on-year in response to market circumstances. Silica sand is also imported in to the Plan area as a raw material for a glass manufacturing plant near Selby, as well as to other locations in the Yorkshire and Humber area. These imports, other than clear glass grade silica sand, 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.
- 2.69 Transport of minerals within the Plan area is mainly by road although potash extracted from Boulby mine is transported by rail, whilst gas is transported by pipeline. Some minerals are imported into the Plan area by rail, but this is currently limited to two sites in Selby district.
- 2.70 The continued availability of reserves of some minerals, particularly sand and gravel and silica sand, 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 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.

- 2.71 Since work started on the Joint Plan, there has been a greatly increased focus on the potential for developing shale gas resources in the Plan area. This follows the announcement of new oil and gas exploration and development licences in December 2015 and a decision by NYCC in May 2016 to grant permission for hydraulic fracturing of an existing well at Kirby Misperton in the Vale of Pickering.
- 2.72 In June 2015, the North York Moors National Park Authority resolved to grant, permission for development of a major new polyhalite mine in the north eastern part of the National Park. The permission was issued in October 2015.
- 2.73 Whilst planning for the future supply of minerals is clearly important, there is also a need to ensure that other aspects of the Plan area that are highly valued, such as its high-quality landscapes and natural, built and cultural heritage (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

- 2.74 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 practice 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, for example as a result of transportation requirements and the nature of 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, suggesting a need for some flexibility in the Joint Plan.
- 2.75 Waste arises from a wide range of domestic, commercial and industrial activities. The main waste types (streams) arising within the Plan area include:
- Local Authority Collected Waste (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 (CD&E)
 - Hazardous waste
 - Agricultural waste
 - Low level (non-nuclear industry) radioactive waste (LLR waste)
 - Waste Water.
- 2.76 LACW, C&I and CD&E waste are the three main types which need to be considered in the Joint Plan, although the Plan also contains appropriate policy for other important waste streams known to arise. Of the three main streams, CD&E waste is the most significant by volume in the Plan area.

- 2.77 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. Concentrated populations and commercial/industrial activities, as are found 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. The 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.
- 2.78 The majority of waste in the 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 hierarchy⁷, 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. The Government defines such a position as a 'zero waste economy'.
- 2.79 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.
- 2.80 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 to support the more sustainable management of waste. This can include setting out the general scale, distribution 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.
- 2.81 It is not the role of the Joint Plan to specify how waste is collected, or the detailed processes and technologies by which it must be managed. These are mainly matters for business and the waste collection and disposal authorities. Figure 7 below shows the waste disposal authorities covering the Plan area. Most of the waste arising in the North York Moors and Yorkshire Dales National Parks is managed outside the Parks but within the NYCC area, and this situation is expected to continue.

⁷ 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.

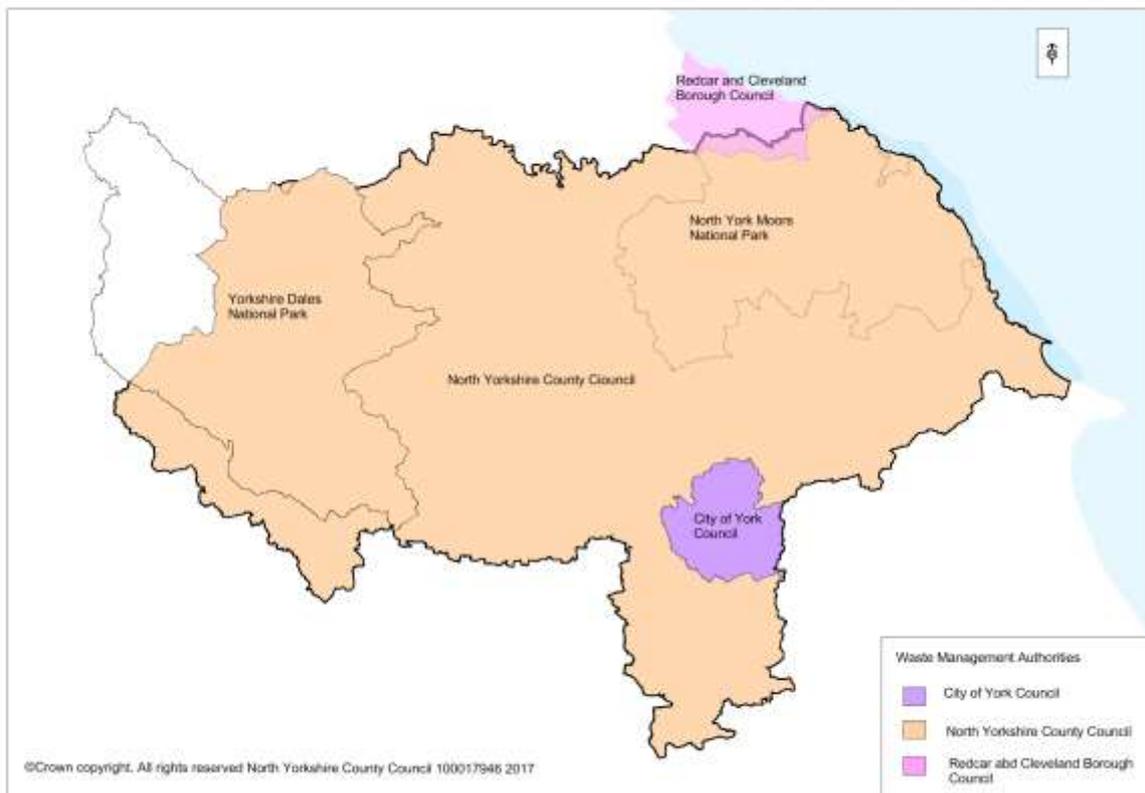


Figure 7: Waste Disposal Authorities covering the Plan area.

- 2.82 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). Targets for waste management in the part of the North York Moors National Park falling within Redcar and Cleveland Borough are set out in the Tees Valley Joint Waste Management Strategy. Whilst these matters are clearly of relevance to the Joint 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.
- 2.83 The management of waste is not necessarily constrained by local authority boundaries. Evidence 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 Joint Plan.

Links between minerals and waste development

- 2.84 There are important links between minerals and waste development. The efficient use of materials such as waste power station ash, as alternatives to primary minerals, can help to conserve natural resources. 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 residual inert waste via landfill can help to improve the quality of derelict or degraded land. These links need to be reflected in the content of the Joint Plan.

- 2.85 Minerals and waste developments can also deliver benefits. For example, through the careful design, operation and reclamation of mineral sites it may be practicable to enhance wildlife habitats, improve the provision of floodwater storage capacity or deliver other environmental benefits help support local businesses and the economy. Some waste developments may be able to produce power or heat for use by local consumers.
- 2.86 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 Joint Plan is to develop planning policies which balance the need for development with ensuring that any harmful impacts are minimised through the appropriate location, design and operation of development.

Addressing the Duty to Cooperate

- 2.87 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 prescribed 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.
- 2.88 Development of the evidence base for the Joint Plan, together with the outcome of a range of consultation activity, has identified a number of issues on which cooperation with other bodies has been required 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 North East and the implications of potential shortfalls in indigenous supply in parts of these areas.
 - Cross boundary supply issues relating to silica sand, which is a mineral of national importance.
 - 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 Plan area.
- 2.89 Cooperation with a wide range of relevant organisations has taken place in relation to the above matters, resulting in the following specific actions:
- Preparation of a joint Local Aggregates Assessment for the North Yorkshire sub-region to help to establish the scale of future requirements for aggregates minerals
 - Preparation of a Yorkshire and Humber Waste Position Statement presenting evidence on waste arisings and capacity issues over the Yorkshire and Humber area
 - Preparation of a joint evidence study on waste capacity needs for the North Yorkshire sub-region

- Agreed 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 Joint Plan.

2.90 A statement⁸ summarising work undertaken in relation to the Duty to Cooperate can be found in the evidence pages on the Joint Plan website.

⁸ Duty to Cooperate Summary Document for Publication 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 Joint Plan.
- 3.2 The need to ensure relevant issues have been taken into account is reinforced through the NPPF, which requires the Joint Plan to be justified and based upon proportionate evidence.
- 3.3 The issues and challenges that the Joint Plan needs to address have been identified through:
- Review of the NPPF, PPG, 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 during consultation on the Joint Plan

Issues and Challenges Summary

- 3.4 The issues and challenges considered to be of most significance are summarised below. These are addressed in more detail in Chapters 5 to 9 of the Joint Plan.

Minerals

- Ensuring a continuity of supply of minerals, reflecting where practicable the likely levels of economic and housing growth and future requirements for minerals;
- Encouraging the use of alternative sources of supply of minerals such as secondary, recycled and marine aggregate over primary land won minerals extraction;
- Maintaining the required landbanks 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 hydrocarbon resources such as shale gas as well as planning for conventional forms of energy minerals;
- Addressing commercial interest for potash mining in the National Park;
- Safeguarding important minerals resources and infrastructure from sterilisation by other uses;
- Ensuring there are sufficient safeguards in place to minimise the 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 encouraging 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 practice;
- 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 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 and ground and surface water supply and quality; 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 Joint Plan.

Chapter 4: Vision and Objectives

- 4.1 Having a vision and objectives gives direction to the policies in the Plan and helps to ensure it delivers what we want to achieve. The vision and objectives in this Chapter respond to the issues and challenges facing the area and reflect the outcomes of public consultation, as well as the evidence base and the wider policy context.

Vision and Priorities

Over the period to 31 December 2030 the 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 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 generated and the 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 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 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 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 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 to 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, environmental 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 Joint Plan and the distribution of these will reflect 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 managed as near to where it arises as practicable, appropriate to the waste stream and scale of arisings, through 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 Plan area will have been protected, with particular protection afforded to the North York Moors National Park, the Areas of Outstanding Natural Beauty, the historic City of York and the World Heritage Site at Fountains Abbey/Studley Royal*

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 and health of local communities, the sustainability of local businesses and the high-quality environment of the Plan area are given robust protection, including from any adverse cumulative impacts arising from development of shale gas resources. 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 local access and enhancing biodiversity and ecological networks at a landscape scale where practicable, as well as protecting and restoring high quality agricultural land.*

Objectives

- 4.2 Based on the Vision and the priorities identified above, the following objectives provide 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
Explanation	This means 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; meeting national and local targets for high quality 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, quarries or degraded land are restored to beneficial use, and identifying 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 and safeguarding important waste management infrastructure
Explanation	This means 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 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 to 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
Explanation	This means 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
Explanation	This means 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 identifying 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, built development, quality of life, local distinctiveness and energy requirements, within the principles of sustainable development
Explanation.	This means 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, recognising the role of the Plan area in the supply of minerals beyond the 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
Explanation	This means 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. It also includes identifying appropriate development criteria for new sites where identification of specific sites or areas is not practicable.

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
Explanation	This means 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 Plan area.
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Objective 8	Promoting the use of alternatives to road transport and ensuring that new development is served by suitable transport networks
Explanation	This means developing locational policy which encourages new waste management infrastructure, minerals workings and minerals supply infrastructure in locations where sustainable transport modes such as rail, water, pipeline and underground conveyor systems can be utilised where practicable for longer distance and large scale movements; and; where such modes are not practicable, that locations for development are well-connected to suitable highways infrastructure and impacts on the road network minimised.

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

Objective 9	Protecting and where appropriate enhancing the natural and historic environment, landscapes and tranquil areas of the Plan area
Explanation	This means developing policy to protect, conserve and where practicable enhance the environment of the Plan area, including natural, historic and pre-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, the AONBs, and the historic character and setting of 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
Explanation.	This means 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	Encouraging the sustainable design and operation of minerals and waste development activity, including using opportunities arising from minerals and waste development and reclamation activity to mitigate and adapt to climate change
Explanation	This means 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, geodiversity, recreation and public access and other green infrastructure through reclamation of minerals workings
Explanation	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 public access and ensure measures are in place to enhance green infrastructure. This objective also supports a strategic, landscape-scale approach to reclamation where this could help to minimise adverse impacts and deliver maximum benefits.

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.
- 4.4 The Policies Map illustrates geographically the policies in the Joint 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/mwconsult.
- 4.5 The Plan area is very large. To ensure that the paper version of 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 illustrate some of the large-scale constraints, such as flood zones and aerodrome safeguarding zones.

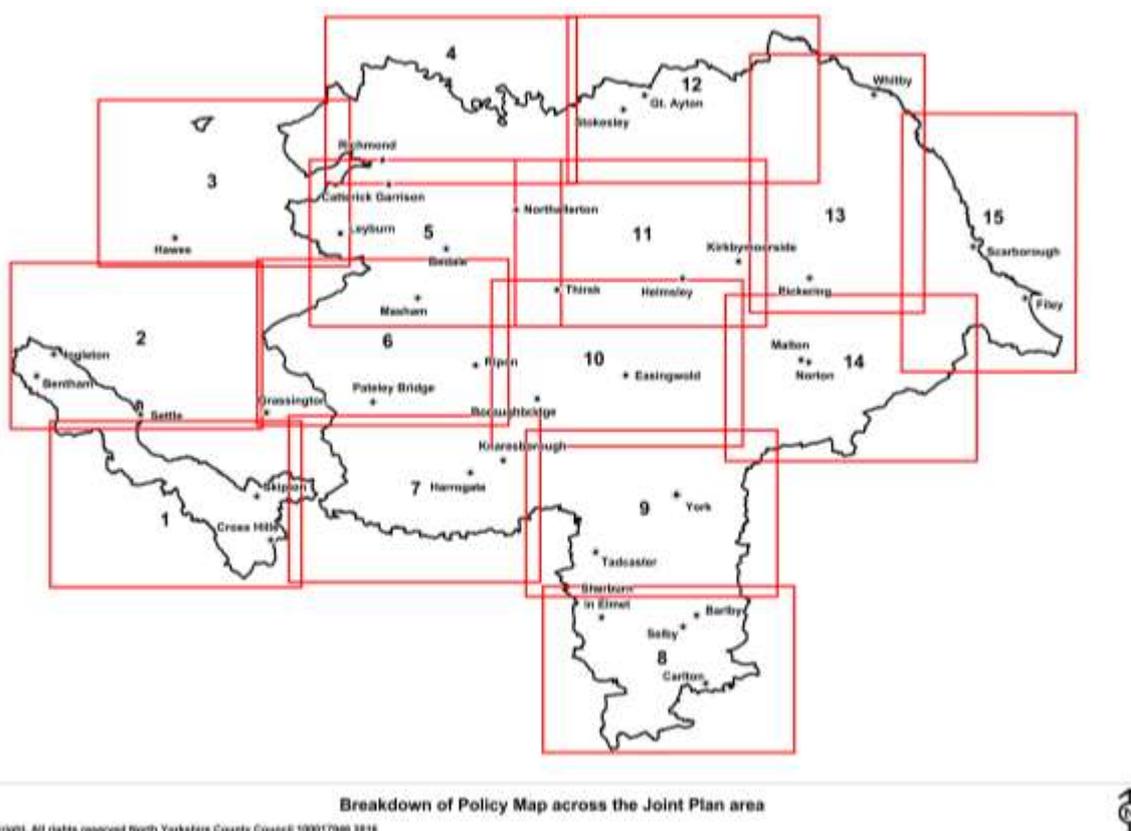
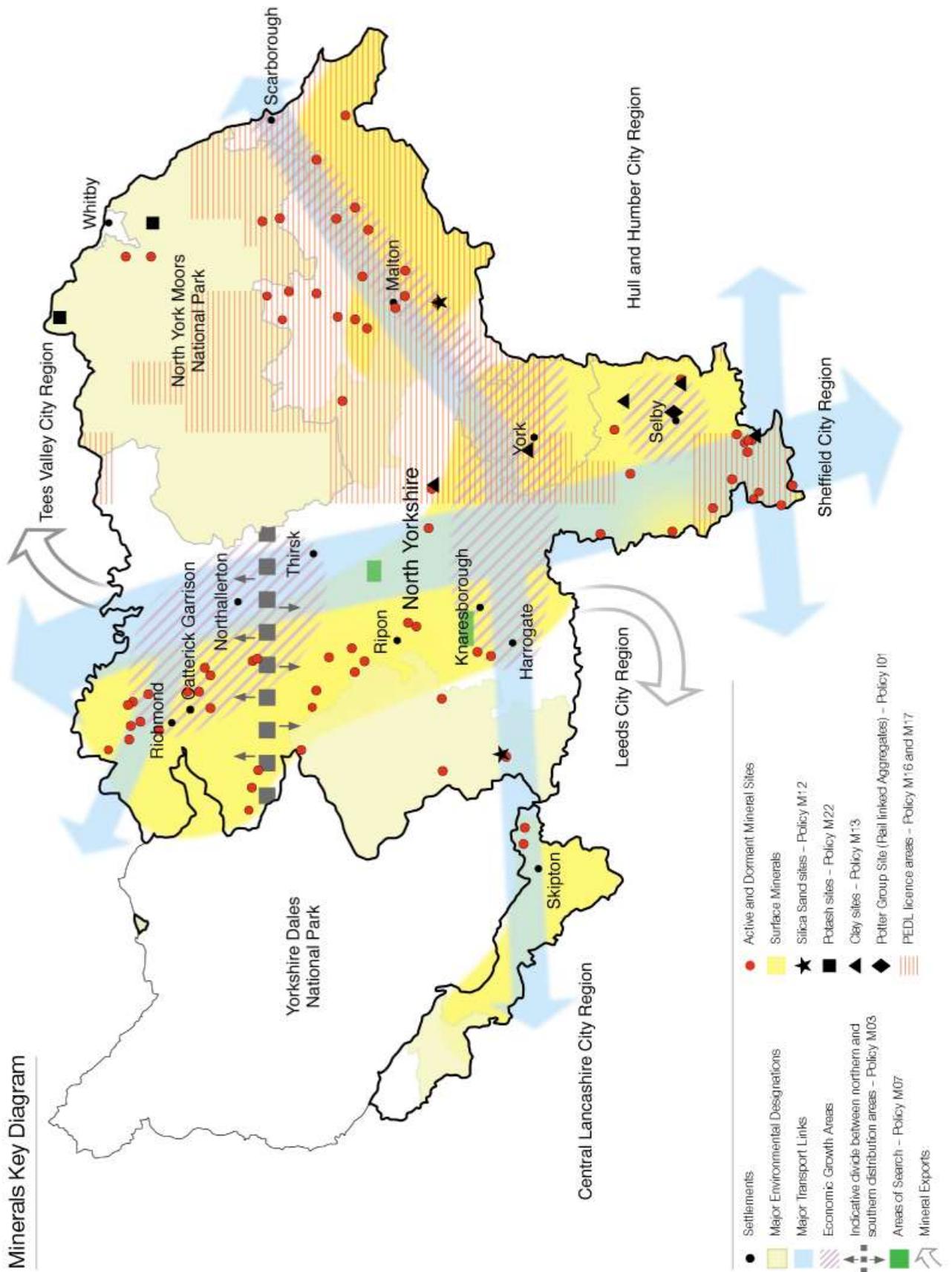
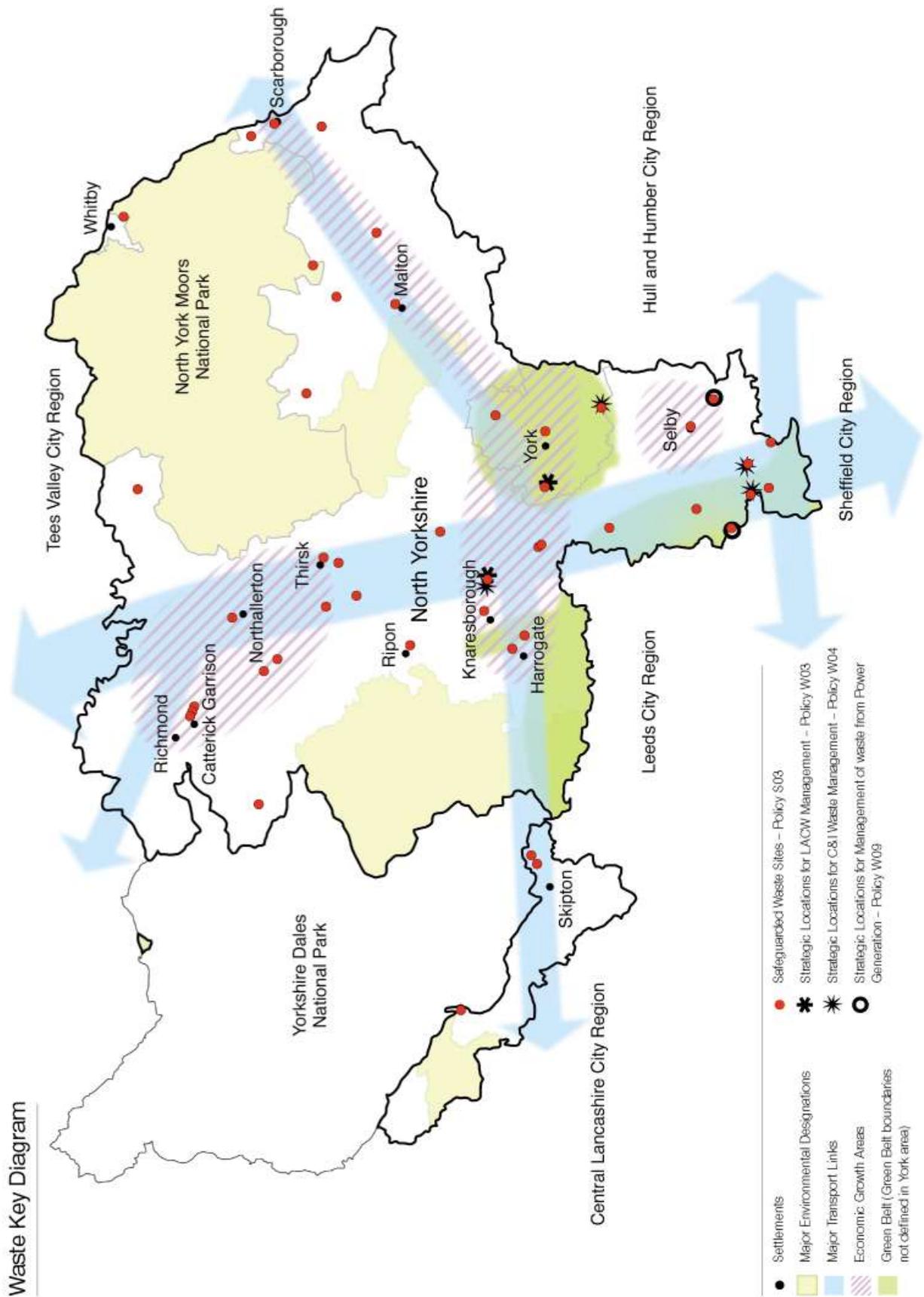


Figure 8: Breakdown of Policies Map across the Plan area

- 4.6 Both the minerals and waste key diagrams (see below) are prepared on a base plan reflecting elements of the York, North Yorkshire and East Riding non-statutory 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 identifies the general extent of surface minerals resources, reflecting the fact that minerals can only be worked where they occur. Many of these resources are also proposed for safeguarding in the Joint Plan. Main areas of important environmental designations, where mineral working is constrained by national and local policy, 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 to indicate where development is currently taking place, or where there is potential for it to take place.
- 4.8 The waste key diagram identifies important existing waste infrastructure which is proposed for safeguarding in the Joint 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 through preparation of the City of York Local Plan.





Monitoring and Review

- 4.9 Monitoring the effects of the policies set out in the Joint Plan will be important. This is to ensure that policies are having their intended effects and to identify whether any review is required. A monitoring framework has been prepared to accompany the Joint Plan and is provided in Appendix 3.
- 4.10 National legislation and planning policy requires that development plans be reviewed every five years from adoption. It is also possible that matters justifying a review may arise over a timeframe of less than five years. The need for review may arise as a result of factors such as a significant change in circumstances, including the availability of important new evidence, or a major change to national policy, or as a result of changing and unforeseen development pressures in an area.
- 4.11 There are three key policy areas addressed in the Joint Plan, identifiable at this stage, which could lead to a need for review. These are:
- To ensure that adequate landbanks of sand and gravel and/or crushed rock can be maintained in the latter part of the Plan period. This will be influenced by the actual level of demand for these minerals which arises during the earlier years of the Joint Plan and whether suitable proposals are brought forward on sites or areas identified in the Joint Plan. This matter will be kept under review including through the preparation of an annual Local Aggregates Assessment, with review of the relevant policies and any further requirement for site allocations or areas carried out as necessary; and;
 - To ensure that sufficient site allocations are identified to meet requirements resulting from a significant and unforeseen increase in waste arising in the area. This matter will be kept under review through monitoring of the Plan; and;
 - To respond to new issues arising out of any further exploration activity for shale gas in the area. Around the time of finalisation of the Joint Plan, in November 2019, the Government imposed an effective moratorium on hydraulic fracturing by introducing a presumption against the issuing of any further Hydraulic Fracturing Consents, until compelling new evidence is provided which would address concerns about the prediction and management of induced seismicity. A written Ministerial Statement accompanying the introduction of the moratorium emphasised the Government's view that natural gas remains an important source of secure and affordable energy and that shale gas has a potential role in this. As the Joint Plan is intended to cover the period to 2030, the Authorities take the view that it is important to maintain local policy for shale gas development, so as to ensure that local policy coverage is in place should the moratorium be lifted, but it will be necessary to keep under review both the need for, and scope of, these policies. At present there is substantial uncertainty over the extent and geographical distribution of any commercially recoverable gas and this factor, together with the very early stage of the shale gas industry in the UK as a whole, leads to a lack of clarity on the scale of development pressure the area could be facing. There is also some uncertainty over the specific development 'model' that may be followed by industry in the UK with respect to shale gas, and how this might influence the scale and nature of planning impacts that could arise. Such impacts might include those affecting a localised area only, whereas other effects, particularly those relating to greenhouse gas emissions for example, could have wider implications in terms of climate change considerations. Whilst the policies in the Joint Plan set out a comprehensive range of criteria to deal with proposals for hydrocarbons development, based on available information, and represent a

precautionary approach reflecting this uncertainty, it may be practicable to develop these further in future. This could require, in due course, provision of more detailed spatial guidance on the location and scale of development which may be acceptable, as well as updated criteria on relevant operational issues which arise. The MPAs will therefore initiate a review of these policies where this would be justified by significant new evidence emerging on relevant matters including:

- a) the scale and distribution of proposals for commercial production that could come forward following further exploration and appraisal activity;
- b) the environmental, economic, amenity or public health impacts of hydrocarbon development (including impacts from greenhouse gas emissions and on climate change, and as a result of induced seismicity);
- c) the award of any further Petroleum Exploration, Production and Development Licences in the Plan area or other significant regulatory changes relevant to the development of local planning policy;
- d) where the capacity and capability of existing treatment facilities to deal with waste water arisings may be significantly challenged.

Chapter 5: Minerals

- 5.1 This Chapter puts forward policies to help to maintain continuity of supply of the various mineral resources present in the Plan area. Where practicable it identifies expected future needs and how those needs could be met, as well as any key 'spatial' issues that may be relevant. In this respect it should be noted that no overall spatial approach to extracting all forms of mineral worked in the Plan area is included, mainly because minerals can only be extracted where they occur in economically viable quantities and this is fundamentally constrained by geology. 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 other minerals worked in the area. 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 other parts of Yorkshire and Humber and the North East, as well as meeting local requirements. Minerals resource information produced to support preparation of the Joint Plan indicates that the large majority of potential sand and gravel resources in the Plan area, particularly those of greatest commercial significance, 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 much lower.

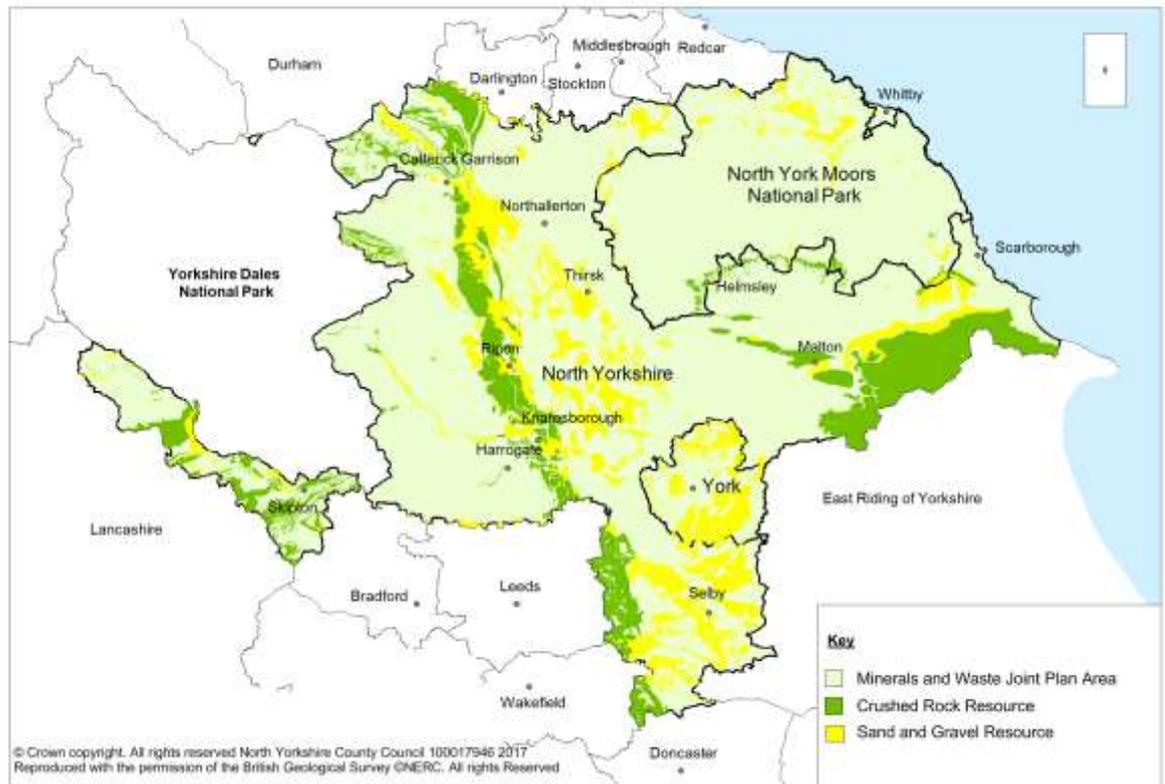


Figure 9: Aggregate resources in Plan area

- 5.4 Crushed rock resources in the Plan area typically comprise three main types: Carboniferous limestone, which occurs in the north around the Scotch Corner-Leyburn area in Richmondshire and Craven in the west; Magnesian limestone, which occurs as a narrow band running north-south through the central part of the 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 previously been produced but working has now stopped. There are no crushed rock resources in the City of York.
- 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 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 and would not compromise the supply of building stone extraction as the primary activity,

<p>and where the removal of crushed rock from the site will not compromise the high quality reclamation and afteruse of the site.</p> <p>2) In the Areas of Outstanding Natural Beauty, the extension of time for the extraction of remaining permitted reserves at existing quarries and/or 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, enhanced mitigation and higher-quality site reclamation compared with that required by the existing permission/s. Where proposals are considered to comprise major development the test for major development in Policy D04 will also need to be satisfied.</p> <p>3) In the City of York area, the small scale extraction of sand and gravel where this is consistent with safeguarding the historic character and setting of the City.</p>	
<p>Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p><i>M02, M03, M05, M07, M08, M09, M10, D01, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11, D12</i></p>	<p><i>Objectives 6, 7, 9</i></p>
<p>Monitoring: Monitoring indicator 1 (see Appendix 3)</p>	

Policy Justification

- 5.6 Due to a combination of resource availability issues and environmental constraints, it is expected that the NYCC area will be 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 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 substantial permitted reserves elsewhere in the Plan area, as well as 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 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 the 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 to ensure that local economic benefits, including local employment, are sustained, as well as maintain 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 a time extension or additional extraction through lateral extensions or deepening are proposed, a very high degree of protection of the environment should be demonstrated and, preferably, a better quality of mitigation and site reclamation secured compared with that required by the existing permission/s. This is necessary to 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. National policy does not preclude major development from taking place in protected areas. However, proposals need to be considered against the requirements for major development which state that exceptional circumstances need to be shown and that it can be demonstrated 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 need to be subject to the test, as set out in Policy D04 of the Plan.
- 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 deliver a local contribution to supply, subject to suitable proposals coming forward. The emerging 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 Joint Plan.

Scale of provision of 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. 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 15 year period 1st January 2016 to 31st December 2030 will be 36.6 million tonnes, at an equivalent annual rate of 2.44 million tonnes as indicated in Table 1 and Table 3.

Additional provision shall be made, through a 5 yearly review of provision in the Plan, if necessary to maintain a landbank of at least 7 years for sand and gravel at 31 December 2030 and/or to meet additional requirements identified through

updates to the Local Aggregate Assessment, 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, S01, D01

Objective 5

Monitoring: Monitoring indicator 2 (see Appendix 3)

Policy Justification

- 5.13 The 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 northwards into the Tees Valley and adjacent areas in the North East from quarries in northern North Yorkshire is also very important. In 2014 around a half of sales were exports 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 Plan period.
- 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 To ensure that an adequate supply (i.e. to maintain a landbank of at least 7 years) is available at the end of 2030, additional resources may be needed to deliver this, depending on the actual scale of demand that arises. 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 precise level of further provision that may be needed in order to maintain a landbank of at least 7 years at 31 December 2030. This is a matter which can be addressed in monitoring of the Joint Plan and via a 5 yearly review, at which time the level of additional provision which may be needed can be the subject of updated assessment, through the annual review of the Local Aggregates Assessment, with additional site allocations brought forward if necessary. A commitment to maintaining a landbank of at least 7 years is set out in Policy M04 and Policies M07 and M08 identify sites which could be brought forward to meet landbank requirements for sand and gravel in the later part of the Plan period.

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 Joint 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:

- **Concreting sand and gravel (Southwards distribution area): 50%**

<ul style="list-style-type: none"> • Concreting sand and gravel (Northwards distribution area): 45% • Building sand: 5% 	
<p>In accordance with the numerical requirements identified in Tables 1 and 2 and based on the interactive location of the Northwards and Southwards distribution areas as shown in the Minerals Key Diagram on page 44.</p>	
<p>If it is not practicable to make overall provision in accordance with this ratio, through grant of permission on allocated sites, provision for concreting sand and gravel shall be made across both areas in combination.</p>	
<p>Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p><i>M01, M02, M04, M07, M08, S01, S04, S05, D01, Minerals Key Diagram (page 44)</i></p>	<p><i>Objectives 5, 6, 7</i></p>
<p>Monitoring: Monitoring indicator 3 (see Appendix 3)</p>	

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 in the North East and Yorkshire and Humber, where in some locations 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. This reflects the distribution of key markets for sand and gravel as well as the distribution of sources of supply and has been successful in maintaining supply and in helping to ensure a distribution of mineral workings which reflects proximity to markets, therefore helping to reduce overall transportation distances. In determining in which area a proposed site or reserve falls, regard will be had to its geographical location and the likely markets for the mineral. The division between the concreting sand and gravel northwards and southwards distribution areas is shown indicatively on the minerals key diagram (see page 43 of the Plan). Specific requirements for sand and gravel in order to maintain adequate supply throughout the Plan period are set out in Policies M07 and M08 and Tables 1 and 2.
- 5.19 Although there are some indications that there could be a small relative increase in future demand from markets to the south (i.e. in West and South Yorkshire) in response to future supply constraints and growth pressures, an allowance for this has been made in the overall forecast of demand for the 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 Plan area. It is therefore considered that provision should be made in general accordance with the recent historic shares of total provision from each distribution area, with separate provision for building sand reflecting the different end uses for this product.
- 5.20 In common with other types of minerals resources present in the Plan area, sand and gravel resources partly overlap with a range of sensitive locations and designations, including important natural environment designations and heritage assets, some of which are of large geographical extent. Later policies in the Joint Plan seek to ensure that, so far as practicable, future requirements for sand and gravel are met through identifying particular sites or areas and this, along with the development management policies in the Joint Plan, provides a mechanism to ensure that the

impacts of any future sand and gravel working, wherever it is proposed, would not lead to unacceptable impacts.

Landbanks for sand and gravel

- 5.21 Landbanks are an important aspect of Government policy to ensure continuity of supply of minerals and 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 for at least 7 years at the anticipated annual rate of extraction identified in the Local Plan).

Policy M04: Landbanks for sand and gravel	
A landbank of at least 7 years for 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 landbank of at least 7 years will be maintained throughout the Plan period for building sand.	
Main responsibility for implementation of policy: NYCC, CYC, NYMNP and Minerals Industry	
Key links to other relevant policies and objectives	
<i>M01, M02, M03, M07, M08, M10, S01, D01</i>	<i>Objective 5</i>
Monitoring: Monitoring indicator 4 (see Appendix 3)	

Policy Justification

- 5.22 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. 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.
- 5.23 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 Joint Plan, the provision needed to maintain sand and gravel landbank requirements will be made within those parts of the Plan area outside the North York Moors National Park. National planning policy seeks to ensure, as far as practical, that landbanks are maintained outside National Parks.
- 5.24 Taking account of the distribution of sand and gravel resources within the Plan area and the existence of a significant number of individual production sites and operator companies, it is not considered necessary to set a minimum sand and gravel landbank period of more than 7 years.

Scale of provision of crushed rock over the Plan period

- 5.25 The Plan area is a major producer of crushed rock in the Yorkshire and Humber Region and a significant exporter to other areas of Yorkshire and the Humber and the North East.

- 5.26 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 15 year period 1st January 2016 to 31st December 2030 shall be 51.75 million tonnes, in accordance with the numerical requirements identified in Table 3, at an equivalent annual rate of 3.45 million tonnes, within which specific provision for a total of 18 million tonnes at an equivalent annual rate of 1.20 million tonnes per annum shall be for Magnesian Limestone and 6.8 million tonnes at an equivalent annual rate of 0.45 million tonnes per annum shall be for Jurassic Limestone.	
Additional provision shall be made through a 5 yearly review of provision in the Plan, if necessary, in order to maintain at least a 10 year landbank of crushed rock, including a separate landbank of at least 10 years for Magnesian Limestone, at 31 December 2030 and/or to meet additional requirements identified through updates to the Local Aggregates Assessment 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	
<i>M01, M06, M09, M10, M11, S01, D01</i>	<i>Objective 5</i>
Monitoring: Monitoring indicator 5 (see Appendix 3)	

Policy Justification

- 5.27 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 area has traditionally been an important supplier of crushed rock into other parts of Yorkshire and Humber and the North East, 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.
- 5.28 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 to ensure that an adequate supply of this particular rock type can be maintained, as well as help to maintain local sources of aggregates supply in the southern and central part of the Plan area. It is therefore appropriate to identify specific provision for this type of rock separately from other crushed rock sources.
- 5.29 Magnesian Limestone resources in the Plan area form part of an extensive but distinctive topographical feature known as the Southern Magnesian Limestone Ridge. The Ridge is important due to the historic landscapes and designated and undesignated heritage assets it contains. Whilst Magnesian Limestone working on the Ridge has been taken taking place for many years, providing policy support in the Joint Plan for maintaining the supply of this rock type could create a risk of adverse

impacts on heritage assets. However, the overall scale of additional development expected to be required is relatively small when considered in the context of the geographical extent of the Ridge. Locations for further working are addressed through specific site allocations in the Joint Plan, which have been subject to assessment, including in relation to their potential for impact on historic landscapes and heritage assets. The development management policies in the Joint Plan provide further protection and make specific reference to the significance of the Southern Magnesian Limestone Ridge. Policy support for the continued availability of Magnesian Limestone, which is a well-established element of the overall supply of crushed rock in the Joint Plan area, is important in that it could help to maintain an appropriate distribution of supply of crushed rock as well as the availability of aggregates suitable for a range of end uses, to complement supply from other sources.

- 5.30 To ensure that an adequate supply of crushed rock (i.e. a landbank of at least 10 years) is available at the end of 2030, it may also be necessary to identify some additional resources towards the end of the Plan period, depending on the actual scale of demand and the extent to which any reserves are permitted as a result of implementing the Joint Plan. As it is intended that the Local Aggregates Assessment will be updated regularly, and that changes to the demand forecast may be expected over the Plan period, it is not considered appropriate to specify, at this stage, the level of further provision that may be needed to maintain a landbank of at least 10 years at 2030. This is a matter which can be addressed in monitoring of the Joint Plan and via a 5 yearly review, at which time the level of additional provision which may be needed can be the subject of an updated assessment, and additional provision made if necessary. A commitment to maintaining landbank of at least 10 years of crushed rock throughout the Plan period, including a separate landbank of at least 10 years for Magnesian Limestone, is set out in the following policy.

Landbanks for Crushed Rock

- 5.31 National planning policy for aggregate minerals requires the maintenance of landbanks (a stock of reserves with planning permission for extraction) to help to 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	
An overall landbank of at least 10 years will be maintained for crushed rock throughout the Plan period. A separate landbank of at least 10 years will be identified and maintained for Magnesian Limestone crushed rock throughout the plan period.	
Where new reserves of crushed rock are required in order to maintain an overall landbank of at least 10 years these will, as far as practical, be sourced from outside the National Park and Areas of Outstanding Natural Beauty.	
Main responsibility for implementation of policy: NYCC, CYC, NYMNP and Minerals Industry	
Key links to other relevant policies and objectives	
<i>M01, M05, M09, S01, D01</i>	<i>Objective 5</i>
Monitoring: Monitoring indicator 6 (see Appendix 3)	

Policy Justification

- 5.32 National Planning Policy requires a landbank of crushed rock sufficient for at least 10 years based on the anticipated rate of supply. The approach for crushed rock is to identify an overall landbank for crushed rock, along with a separate landbank for Magnesian Limestone as it mainly serves different end uses and 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 and ensuring that appropriate provision is maintained, consistent with the approach in Policy M05.
- 5.33 National policy supports the maintenance of landbanks of aggregate minerals from locations outside National Parks and AONBs, so far as practical. 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 the release of crushed rock in the Park to maintain the landbank would not be supported by national policy, unless it is not practical to make provision outside the designated area. Both AONBs currently contribute to the supply of crushed rock and therefore the overall landbank of reserves. The minerals supply policies in the Joint 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 of at least 10 years, will not be supported under this policy, unless it is not practical to make provision outside the designated area.

Maintenance of primary aggregates supply

- 5.34 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. Where this is not practicable, preferred areas or areas of search should be identified, to indicate where resources potentially suitable for working may be located.
- 5.35 The assessment of future requirements for aggregate, carried out when preparing the Joint Plan, has indicated that provision needs to be made for further working to help to ensure continuity of supply of 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 and areas identified in the Joint Plan for working, as shown on the Policies Map and as indicated in Table 1.

Part 1) Sand and gravel (northwards distribution) site allocations:

- i) Allocations required in order to meet requirements during the Plan period:**

Land at Killerby (MJP21), in Hambleton and Richmondshire Districts

- ii) Allocations potentially required to contribute to maintenance of an adequate landbank at 31 December 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 or there is a shortfall in production capacity in the northwards distribution area requiring the release of additional sites for working:

Land at Home Farm, Kirkby Fleetham (MJP33), in Hambleton District
Land South of Catterick (MJP17), in Hambleton and Richmondshire Districts

Additional Preferred Area on Land South of Catterick, in Hambleton and Richmondshire Districts

Proposals for development of these sites will be required to take account of the key sensitivities and incorporate the necessary mitigation measures that are set out in Appendix 1.

Part 2) Sand and gravel (southwards distribution) site allocations and Areas of Search:

- i) Allocations required in order to meet requirements during the Plan period:

Land at Langwith Hall Farm (MJP06), in Hambleton District
Land at Pennycroft and Thorneyfields, Ripon (MJP14), in Harrogate Borough

A Preferred Area on land at Oaklands (MJP07), in Hambleton District

Proposals for development of these sites will be required to take account of the key sensitivities and incorporate the necessary mitigation measures that are set out in Appendix 1.

- ii) Areas of Search A and C for concreting sand and gravel are identified as shown on the key diagram on page 43 and are set out in Appendix 1 as Area of Search A (in Harrogate Borough with a small part in Hambleton District) and Area of Search C (in Harrogate Borough). Planning permission will be granted for development of sites within an Area of Search where necessary in order to maintain an adequate landbank at 31 December 2030 in the southwards distribution area and the need cannot be met through development of allocated sites or preferred areas. Permission will not be granted for development within these Areas of Search prior to 2025, unless there is a need for the earlier release of further reserves in order to maintain an adequate landbank or there is a shortfall in production capacity in the southwards distribution area requiring the release of additional sites for working.

- Part 3) Permission will be granted outside allocated sites, Preferred Areas and Areas of Search where the development would contribute to maintenance of an adequate and steady supply of concreting sand and gravel that cannot be met through reserves on sites or areas identified in the Plan, and/or the development would support the maintenance of adequate production capacity or an effective geographical distribution**

of sources of supply in the Plan area. Proposals will also need to be consistent with the development management policies in the Plan.	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPAs and District and Borough Councils	
Key links to other relevant policies and objectives	
<i>M02, M03, M04, S01, Minerals Key Diagram (page 44)</i>	<i>Objectives 5, 6, 7</i>
Monitoring: Monitoring indicator 7 (see Appendix 3)	

Policy Justification

- 5.36 Evidence indicates that, taking into account the level of permitted reserves at the end of 2015, additional provision of the order of 10.3mt is required for the sand and gravel northwards distribution area over the period to 31 December 2030. The equivalent figure for the southwards distribution area is 5.9mt. Sites with existing reserves expected to make a contribution to supply are listed in Table 1 below. Additional reserves would be needed in both areas to help to maintain a landbank of at least 7 years at the end of the Plan period, in line with Policy M04. The scale of additional reserves required would be 7.7mt (northwards distribution area) and 8.5mt (southwards distribution area).
- 5.37 A range of specific locations have been put forward by industry for consideration during preparation of the Joint Plan and these have been assessed. Requirements for concreting sand and gravel in the northwards distribution area can be met through the release of reserves on specific sites to be allocated in the Joint Plan. Some sites proposed to be allocated are expected to be required in order to meet needs during the period to 2030. A proposed allocation is identified in Part 1i) of the Policy to meet this requirement in the northern distribution area, containing an estimated 11.4mt of reserves. Further sites are identified in part 1ii) of the Policy to help to ensure that an adequate landbank can be maintained in the latter part of the Plan period and that adequate productive capacity can be maintained. Proposals for release of reserves on sites identified in Part 1ii) of the Policy should be accompanied by information to demonstrate why there is a need to release the reserves.
- 5.38 Proposed site allocations in the southwards distribution area contain an indicative 5.8mt. This does not include any additional reserves which could be available within an identified Preferred Area at Oaklands (MJP07). Whilst this area was proposed as a site allocation, a number of constraints to development have been identified, including potential impact on the historic environment and on the setting of Well village. It has not been possible to fully resolve these issues prior to finalisation of the Plan. A Preferred Area has therefore been identified, based on the submission boundary as shown in Appendix 1. In view of the constraints at this site it is not expected that the whole of this area would be acceptable for development and more detailed assessment would be needed, through a detailed planning application, in order to identify a suitable boundary for working. It has not been practicable to identify other suitable specific sites in the Policy to demonstrate how a further contribution to longer term (post-2030) landbank requirements could be made. To address this, and to provide an element of flexibility in overall provision, Areas of Search have been identified. Based on available information, these Areas contain substantial resources of concreting sand and gravel and could provide suitable locations for the identification of further reserves for the southwards distribution area. To help ensure a planned approach to provision, it would not be appropriate to release reserves in sites within these Areas, unless a shortfall in the landbank indicates that additional reserves are required. Proposals for development of sites within Areas of Search will also need to demonstrate full compliance with relevant development management policies in the Joint Plan. The following table summarises

requirements and proposed site allocations and Preferred Areas for concreting sand and gravel.

- 5.39 Whilst overall provision made through the Plan, in combination with existing permitted reserves, is expected to be sufficient to maintain a steady and adequate supply of concreting sand and gravel over the Plan period, it is possible that, for a range of reasons, reserves in these sites or areas may not be able to deliver the expected supply, or demand may be higher than expected. It is also recognised that circumstances could arise where the release of further reserves for working could help deliver clear sustainability benefits. This could include benefits arising through proposals which would ensure that adequate overall production capacity within the Plan area can be maintained, or an effective overall geographical distribution of sources of supply of concreting sand and gravel (for example through reducing reliance on imports from outside the Plan area, or the meeting of specific and more localised demands, not foreseen at the time of preparation of the Plan, and where a local supply source would deliver demonstrable sustainability benefits compared with reliance on established supply sources). Any proposals for release of further reserves on land not allocated in the Plan, and not falling within the scope of Policy M10 Unallocated extensions to existing quarries, would need to be supported with evidence of the claimed sustainability benefit and demonstrate compliance with relevant development management policies set out in Chapter 9 of the Plan.

Summary of concreting sand and gravel requirements and proposed allocations		
	Northwards Distribution	Southwards Distribution
Total estimated requirement over the period 1 January 2016 to 31 December 2030 (million tonnes)	16.5	18.3
Estimated shortfall (balance between permitted reserves at 1 January 2016 and total requirement to 31 December 2030) (million tonnes)	10.3	5.9
Additional reserves required to provide a 7 year landbank at 31 December 2030 (million tonnes)	7.7	8.5
Total estimated reserves available in sites proposed for allocation in Part 1(i) of Policy M07 (million tonnes)	11.4 Comprising: 11.4mt (Killerby site MJP21)	5.8 Comprising: 2.3mt (Langwith Hall Farm site MJP06) 3.5mt (Land at Pennycroft and Thorneyfields, Ripon site MJP14) Oaklands site Preferred Area MJP07 (tonnage estimate not available)
Total estimated reserves available in sites proposed for allocation in Part 1(ii) of Policy M07 in order to contribute to longer term landbank requirements (million tonnes)	5.67 Comprising: 3.5mt (Home Farm site MJP33) 2.17mt (Land south of Catterick site allocation MJP17) and	Estimated requirement to be provided from Areas of Search in the southwards distribution area: 6-8mt depending on scale of any reserves delivered via the Oakland Preferred Area (MJP07).

	Land south of Catterick additional Preferred Area (tonnage estimate not available)	
Sites with permitted reserves of concreting sand and gravel as at 30 June 2016 (excludes dormant sites)	Scorton Quarry, Bridge Farm (Pallet Hill) Quarry, Manor House Farm Quarry	Marfield Quarry, Ripon Quarry, Ripon City Quarry, Nosterfield Quarry, Wykeham Quarry, Ings Farm

Table 1: Summary of requirements, allocations and sites with existing permitted reserves for concreting sand and gravel in northwards and southwards distribution areas

- 5.40 Additional provision, if required in order to meet longer term concreting sand and gravel landbank requirements, will be addressed through a 5 yearly review of the Joint Plan in line with Policy M02.
- 5.41 Planning permission will be granted for development of sites allocated in the Joint Plan subject to compliance with other relevant policies. Proposals will also be expected to demonstrate that any relevant development requirements for the allocation, as identified in Appendix 1, have been addressed, and incorporate appropriate provision for mitigation where necessary.

Building Sand

Policy M08: Meeting building sand requirements	
<p>1) Requirements for building sand will be met through existing permissions and the grant of permission on sites allocated in the Joint Plan for working and shown on the Policies Map as indicated in Table 2</p> <p>Land at Hensall Quarry (MJP22), in Selby District; Land at West Heslerton Quarry (MJP30), in Ryedale District; Land adjacent to Plasmor blockworks, Great Heck (MJP44), in Selby District; Land at Mill Balk Quarry, Great Heck (MJP54), in Selby District.</p> <p>Proposals for the development of these sites will be required to take account of the key sensitivities and incorporate the necessary mitigation measures that are set out in Appendix 1.</p>	
<p>2) Permission will be granted outside allocated sites where the development would contribute to maintenance of an adequate and steady supply of building sand that cannot be met through reserves on sites identified in the Plan, and/or the development would support the maintenance of adequate production capacity or an effective geographical distribution of sources of supply in the Plan area. Proposals will also need to be consistent with the development management policies in the Plan.</p>	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
<i>M02, M03, M04, S01</i>	<i>Objectives 5, 6, 7</i>
Monitoring: Monitoring indicator 8 (see Appendix 3)	

Policy Justification

- 5.42 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 0.9 million tonnes (mt) over the period to 31 December 2030). A further 0.8mt would be required in order to provide a landbank of at least 7 years at 31 December 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 Joint 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 2.5mt of reserves and therefore would also be sufficient to maintain a landbank of at least 7 years for building sand at 31 December 2030. The following table summarises requirements and proposed site allocations for building sand, as well as sites with existing permitted reserves expected to be able to contribute to supply.
- 5.43 Whilst overall provision made through the Plan, in combination with existing permitted reserves, is expected to be sufficient to maintain a steady and adequate supply of building sand over the Plan period, it is possible that, for a range of reasons, reserves in these sites or areas may not be able to deliver the expected supply, or demand may be higher than expected. It is also recognised that circumstances could arise where the release of further reserves for working could help deliver clear sustainability benefits. This could include benefits arising through proposals which would ensure that adequate overall production capacity within the Plan area can be maintained, or an effective overall geographical distribution of sources of supply of building sand (for example through reducing reliance on imports from outside the Plan area, or the meeting of specific and more localised demands, not foreseen at the time of preparation of the Plan, and where a local supply source would deliver demonstrable sustainability benefits compared with reliance on established supply sources). Any proposals for release of further reserves on land not allocated in the Plan, and not falling within the scope of Policy M10 Unallocated extensions to existing quarries, would need to be supported with evidence of the claimed sustainability benefit and demonstrate compliance with relevant development management policies set out in Chapter 9 of the Plan.

Summary of building sand requirements and proposed allocations	
Total estimated requirement over the period 1 January 2016 to 31 December 2030 (million tonnes)	1.8
Estimated shortfall (balance between permitted reserves at 1 January 2016 and total requirement to 31 December 2030) (million tonnes)	0.9
Additional reserves required to provide a 7 year landbank at 31 December 2030 (million tonnes)	0.8
Total estimated reserves available in sites proposed for allocation in Policy M08 (million tonnes)	1.7 Comprising: 1.5mt (Hensall Quarry site MJP22) 0.03-0.05mt (West Heselton Quarry site MJP30) 0.9mt (Land adjacent to Plasmor Blockworks, Great Heck site MJP44) 0.07mt (Mill Balk Quarry site MJP54)

Sites with permitted reserves of building sand as at 30 June 2016 (excludes dormant sites)

Hensall Quarry
Mill Balk Quarry
West Heslerton Quarry

Table 2: Summary of requirements, allocations and sites with existing permitted reserves for building sand

- 5.44 Planning permission will be granted for development of sites allocated in the Joint Plan subject to compliance with other relevant policies. Proposals will also be expected to demonstrate that any relevant development requirements for the allocation, as identified in Appendix 1, have been addressed, and incorporate appropriate provision for mitigation where necessary.

Crushed rock

Policy M09: Meeting crushed rock requirements

Requirements for crushed rock over the Plan period will be met through existing permissions and the grant of permission on sites allocated in the Joint Plan for working shown on the Policies Map, and as indicated in Table 3.

Magnesian Limestone allocations:

- Part 1) Allocations required in order to meet requirements during the Plan period:**

Land at Jackdaw Crag South, Stutton (MJP23), in Selby District;
Land at Barnsdale Bar Quarry (MJP28), in Selby District;
Land at Went Edge Quarry, Kirk Smeaton (MJP29), in Selby District.

- Part 2) Allocations required to contribute to maintaining an adequate landbank at 31 December 2030:**

Land at Gebdykes Quarry (MJP11), in Hambleton District and Harrogate Borough;
Land at Potgate Quarry (MJP10), in Harrogate Borough.

Maintenance of supply of crushed rock is also supported through the identification of allocated sites at:

Land at Settrington Quarry (MJP08) (Jurassic Limestone), in Ryedale District;
Land at Whitewall Quarry (MJP12) (Jurassic Limestone), in Ryedale District;
Land at Darrington Quarry (MJP24) (retention of processing plant site and haul road), in Selby District.

Proposals for the development of sites identified in this Policy will be required to take account of the key sensitivities and incorporate the necessary mitigation measures that are set out in Appendix 1.

- Part 3) Permission will be granted outside allocated sites where the development would contribute to maintenance of an adequate and steady supply of Carboniferous Limestone, Magnesian Limestone and Jurassic Limestone crushed rock that cannot be met through reserves**

on sites identified in the Plan, and/or the development would support the maintenance of adequate production capacity or an effective geographical distribution of sources of supply in the Plan area. Proposals will also need to be consistent with the development management policies in the Plan.

Key links to other relevant policies and objectives

M05, M06, S01

Objectives 5, 6, 7

Monitoring: Monitoring indicator 9 (see Appendix 3)

Policy Justification

- 5.45 Evidence indicates that a further 6.9 million tonnes (mt) of reserves of Magnesian Limestone are needed in order to meet requirements over the period 1 January 2016 to 31 December 2030, based on permitted reserves at the end of 2015. Permission was granted in early 2016 for working of 0.7mt of Magnesian Limestone within an area submitted for allocation at Barnsdale Bar (North area), reducing the remaining requirement to 6.2mt. Sites expected to be able to contribute to supply of Magnesian Limestone during the Plan period are identified in Table 3 below. A further 12mt of reserves would be required in order to maintain a landbank of at least 10 years for Magnesian Limestone at 31 December 2030.
- 5.46 A range of specific locations have been put forward by industry for consideration during preparation of the Joint 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. Sites considered suitable for allocation contain an estimated total of 14.5mt and therefore would also make a significant contribution towards maintaining an adequate landbank of Magnesian Limestone beyond 31 December 2030. Two of these sites (comprising extensions to Gebdykes Quarry and Potgate Quarry) are not expected to make a contribution to supply until around 2020, taking into account the extent of existing permitted reserves, although the additional reserves in these sites are expected to be important in maintaining supply in the latter part of the Plan period and in contributing to an adequate landbank at 31 December 2030. These two sites also facilitate the supply of Magnesian Limestone from a part of the Plan area where other sources of Magnesian Limestone are not available, thus helping to sustain flexibility and an appropriate pattern of supply. The following table summarises requirements and proposed site allocations for Magnesian Limestone.

Summary of crushed rock requirements and allocations	
<u>Rock Type</u>	Million Tonnes
a) <u>Crushed rock (total)</u>	
Total estimated requirement over the Plan period 1 January 2016 to 31 December 2030 at 3.45 million tonnes per annum.	51.8
Additional requirement to maintain 10 year landbank at 31 December 2030	34.5
Total	86.3
Permitted reserves at 1 January 2016	91.9
Residual shortfall to be met through the Plan	Nil

Total volume of reserves in allocations via Policy M09	18.2 (sites MJP08, MJP10, MJP11, MJP12, MJP23, MJP28 and MJP29).
b) Carboniferous Limestone	
Total estimated requirement over the Plan period 1 January 2016 to 31 December 2030 at 1.76 million tonnes per annum.	26.4
Additional requirement to maintain 10 year landbank at 31 December 2030	17.6
Total requirement	44.0
Permitted reserves at 1 January 2016	71.5
Residual shortfall to be met through the Plan	Nil
Total volume of reserves in allocations via Policy M09	Nil
c) Magnesian Limestone	
Total estimated requirement over the Plan period 1 January 2016 to 31 December 2030 at 1.20 million tonnes per annum.	18.0
Additional requirement to maintain 10 year landbank at 31 December 2030	12.0
Total requirement	30.0
Permitted reserves at 1 January 2016	11.1
Residual shortfall to be met through the Plan	18.9
Total volume of reserves in allocations via Policy M09	14.5 comprising: 7.0 part 1 (sites MJP23, MJP28 and MJP29) 7.5 part 2 (sites MJP10 and MJP11)
d) Jurassic Limestone	
Total estimated requirement over the Plan period 1 January 2016 to 31 December 2030 at 0.45 million tonnes per annum.	6.8
Additional requirement to maintain 10 year landbank at 31 December 2030	4.5
Total requirement	11.3
Permitted reserves at 1 January 2016	9.5

Residual shortfall to be met through the Plan		1.8
Total volume of reserves in allocations via Policy M09		3.7 (MJP08 and MJP12)
Sites with permitted reserves of crushed rock as at 30 June 2016 (excludes dormant sites)		
Carboniferous Limestone: Skipton Rock Quarry Pateley Bridge Quarry Barton Quarry Forcett Quarry Leyburn Quarry Wensley Quarry Low Grange Quarry	Magnesian Limestone: Gebdykes Quarry Potgate Quarry Jackdaw Crag Quarry Brotherton Quarry Newthorpe Quarry Went Edge Quarry Barnsdale Bar Quarry	Jurassic Limestone: Newbridge Quarry Settrington Quarry Wath Quarry Whitewall Quarry Hovingham Quarry

Table 3: Summary of crushed rock requirements, and requirements, allocations and sites with existing permitted reserves

- 5.47 Supply of Magnesian Limestone in the Plan area and adjacent areas is also facilitated by 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 and annual output at the site are substantial and make an important contribution to overall supply of Magnesian Limestone. A proposed site allocation for retaining the processing plant site and related infrastructure has been submitted and is considered suitable for allocation.
- 5.48 During preparation of the Joint Plan, sites for working other crushed rock resources (Carboniferous Limestone and Jurassic Limestone) were put forward for consideration⁹. No specific requirement has been identified for the release of further reserves of these types of crushed rock in order to meet requirements over the period to 31 December 2030 and it is not considered that identifying allocations for these is a priority for the Joint Plan. However, a small volume of further reserves of Jurassic Limestone (estimated at 1.8mt) could be needed to maintain a 10 year landbank at 31 December 2030. Of the four sites put forward, only two are considered suitable for allocation. The reserves in these sites (3.7mt) could help to sustain security of supply of Jurassic Limestone in this part of the Plan area. Should proposals come forward for extensions to other existing Carboniferous or Jurassic Limestone sites these will be assessed under the requirements of Policy M10 Unallocated extensions to existing quarries and, if the site is located in an AONB, Policies M01 and D04.
- 5.49 Whilst overall provision made through the Plan, in combination with existing permitted reserves, is expected to be sufficient to maintain a steady and adequate supply over the Plan period, it is possible that, for a range of reasons, reserves in these sites or areas may not be able to deliver the expected supply, or demand may be higher than expected. It is also recognised that circumstances could arise where the release of further reserves for working could help deliver clear sustainability

⁹ Site MJP03 for working Carboniferous Limestone from land at Scarborough Field, Forcett, was subsequently withdrawn.

benefits. This could include benefits arising through proposals which would ensure that adequate overall production capacity within the Plan area can be maintained, or an effective overall geographical distribution of sources of supply of the three main types of crushed rock worked in the area (for example through reducing reliance on imports from outside the Plan area, or the meeting of specific and more localised demands, not foreseen at the time of preparation of the Plan, and where a local supply source would deliver demonstrable sustainability benefits compared with reliance on established supply sources). Any proposals for release of further reserves on land not allocated in the Plan, and not falling within the scope of Policy M10 Unallocated extensions to existing quarries, would need to be supported with evidence of the claimed sustainability benefit and demonstrate compliance with relevant development management policies set out in Chapter 9 of the Plan.

- 5.50 Planning permission will be granted for development of sites allocated in the Joint Plan subject to compliance with other relevant policies. Proposals will also be expected to demonstrate that any relevant development requirements for the allocation, as identified in Appendix 1, have been addressed, and incorporate appropriate provision for mitigation where necessary.

Extensions to existing quarries on unallocated sites

- 5.51 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 Joint 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 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.
- 5.52 It is therefore appropriate to include a policy in the Joint Plan which sets out the main criteria that would be applied to any such proposals.

Policy M10: Unallocated extensions to existing quarries	
Proposals for extensions to minerals extraction sites on land not allocated for working in the Joint Plan will be permitted subject to the following criteria;	
<ul style="list-style-type: none"> i) If the site is in the National Park or an AONB, the requirements for major development in Policy D04 are complied with; ii) The development would not compromise overall delivery of the strategy for the sustainable supply and use of minerals, including encouraging the use of alternatives to primary minerals; iii) The development would be consistent with the development management policies in the Joint Plan. 	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
<i>M02, M03, M05, M11, D01, D04, D02, D03, D05, D06, D07, D08, D09, D10, D11, D12</i>	<i>Objective 5</i>
Monitoring: Monitoring indicator 10 (see Appendix 3)	

Policy Justification

- 5.53 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 Joint 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 important to ensure, where development proposals come forward on land not identified specifically for working, that they do not compromise other important strategic objectives of the Joint Plan and that any environmental and amenity impacts are considered by applying relevant development management policies in the Joint Plan. In all cases, any reserves granted on unallocated sites would, where relevant, contribute towards the landbank of the mineral.
- 5.54 National policy does not preclude major development from taking place in protected areas. However, proposals need to be considered against the requirements for major development, which state that exceptional circumstances need to be shown and it can be demonstrated that they are in the public interest, as set out in more detail in Policy D04 of the Joint Plan. Although the term 'major development' is not defined in this context in national policy, it is likely that most proposals for extensions to aggregates quarries in the National Park and AONBs will be subject to the test.

Secondary, Recycled and Marine Aggregates

- 5.55 National policy 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. The main form of secondary aggregate occurring in the Plan area is 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, although some secondary and recycled materials may be capable of acting as a substitute or partial substitute for primary aggregates in higher specification end uses, such as concrete manufacture.
- 5.56 The southern part of the Plan area contains two major coal-fired power stations (Drax and Eggborough). A third (Ferrybridge) located just outside the boundary of the area and utilising ash disposal facilities located within it has recently ceased coal-fired power generation. Until recently, Kellingley Colliery in Selby district has been a major source of secondary aggregate in the form of colliery spoil. The Colliery closed at the end of 2015. These closures are likely to have some adverse impact on the capability of the area to supply secondary aggregate. However, there is also the potential for ash to be generated by recently permitted waste-to-energy capacity in the area, including the Allerton Waste Recovery Park facility which is currently under construction. Some of this ash also has the potential to be recycled and/or used as secondary aggregate.
- 5.57 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 recent years,

although there may be potential for a small increase in the supply of some secondary and recycled materials. This matter will be kept under review through the LAA.

- 5.58 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 in 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 paragraph 2.54). 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 Joint 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 any review of the Joint Plan, including as referred to in Policy M02. The protection afforded to marine aggregates in the Humber dredging area through Policies AGG1, AGG2 and AGG3 of the statutory East Inshore and Offshore Marine Plans (MMO 2014) should help preserve the potential of this source of supply for the future.

Policy M11: Supply of alternatives to land won primary aggregates

Proposals which would facilitate the supply and use of secondary, recycled and marine aggregate as an alternative to primary land-won aggregate will be permitted including:

- 1) The development of appropriately scaled new ancillary infrastructure, including ancillary manufacturing facilities, using secondary aggregate as the primary raw material, at sites where secondary aggregates are produced, or marine aggregates imported;
- 2) The supply of secondary aggregate from waste disposal sites provided it would not involve disturbance to restored ground or a landscaped feature which has become assimilated into, or is characteristic of, the local landscape, or is of archaeological value;
- 3) The separation of materials with potential for re-use or recycling 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, and 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 extraction at the site;

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

Key links to other relevant policies and objectives

M02, M05, M20, W05, W09, I02, S05, D02, D03, D05, D07, D09

Objectives 4, 6

Monitoring: Monitoring indicator 11 (see Appendix 3)

Policy Justification

- 5.59 A range of measures, capable of being implemented or supported through planning processes, can help to increase the use of secondary and recycled aggregates and

are supported in the Joint Plan. Support for facilities for the management of construction and demolition waste is also provided in the waste policies in Chapter 6 and can also help with supply of materials which can substitute for primary aggregate.

- 5.60 Although the use of secondary and recycled aggregate has benefits in terms of replacing natural materials and in generating economic activity, 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 Joint Plan, particularly the development management policies in Chapter 9. Whilst marine aggregates are not expected to make a major direct contribution to supply in the area over the Plan period, it is appropriate to provide policy support for this in the Joint Plan, to encourage a sustainable mix of supply sources.
- 5.61 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 to minimise overall use of primary aggregate and help to sustain economic activity at minerals extraction sites. However, aggregates quarries are generally located in open countryside and are sometimes subject to a range of environmental constraints. In some cases they are located in the Green Belt and may have been permitted because of the flexibility allowed for minerals extraction in the Green Belt, subject to particular tests. It is considered that appropriately scaled 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 and be consistent with the purposes of the Green Belt. The construction of buildings for the purposes of recycling activity at quarries in the Green Belt would be unlikely to be supported under this policy.
- 5.62 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, to minimise any adverse impacts on environment or amenity.

Silica Sand

- 5.63 Silica sand is a scarce industrial mineral which is of local and national importance and 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. The different qualities of the silica sand at the two locations means that they are suitable for different end uses. Burythorpe Quarry produces foundry sand and Blubberhouses Quarry, which has been mothballed for many years, contains sand suitable for high-quality glass manufacture. There are no resources of silica sand in the City of York area or the North York Moors National Park. The significance of silica sand is such that, in some cases, proposals for development may be dealt with via the Nationally Significant Infrastructure Project procedures.

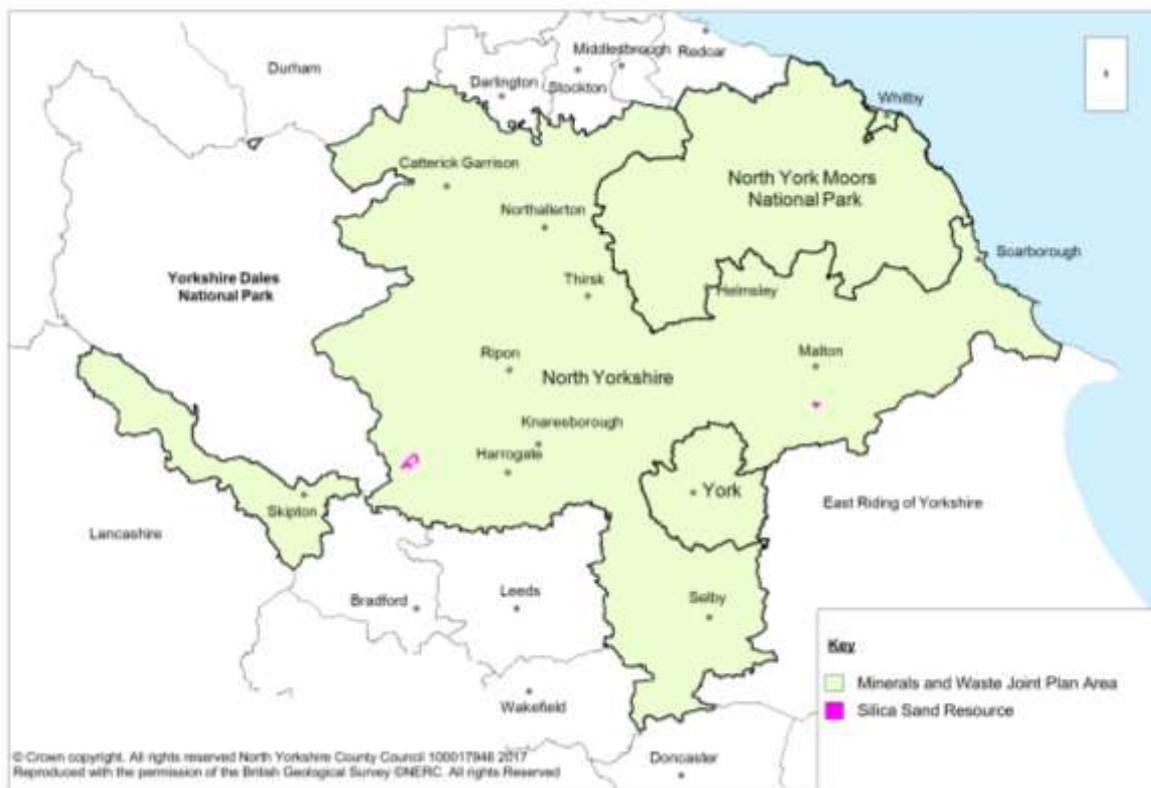


Figure 10: Silica sand resources in Plan area

- 5.64 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 to maintain reserves during the period to 31 December 2030 and a minimum 10 year stock for the site.**
- 2) **In order to secure an adequate supply of silica sand of at least 15 years where significant new capital is required reserves are provided through a site allocation at Blubberhouses Quarry (MJP15). Proposals to extend time to complete existing permitted development or proposals for lateral extensions or deepening, will be supported in principle subject, where relevant, to compliance with the requirements for major development in Policy D04, compliance with the Habitats Regulations and compliance with other relevant development management policies. Any proposals will need to demonstrate a very high standard of mitigation of any environmental impacts and high quality restoration, including protection of peat resources.**

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

- 5.65 National policy supports the maintenance of 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.
- 5.66 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.
- 5.67 There are no published national or local forward projections of likely demand for silica sand. Based on known reserves at the end of 2014 and average annual output, it is likely that there is capability to maintain sufficient supply from this site up to the end of the Plan period. Nevertheless it is possible that factors including variability in the quality of the resource may lead to further reserves needing to be released for Burythorpe Quarry during the Plan period, although specific proposals to achieve this have not yet been identified by the operator.
- 5.68 A number of constraints on 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.
- 5.69 The resource of silica sand located at Blubberhouses Quarry overlaps with internationally important nature conservation designations and, along with a number of other existing or former mineral workings, falls within the Nidderdale AONB. It is also in an area important for the presence of peat. The site has been dormant since 1991 and the original permission has now expired, although prior to expiry an application (ref. NY/2011/0465/73) for an extension of time was submitted, which is currently undetermined. The national policy requirement for available reserves at the Blubberhouses site would be met in the event that the planning application for the extension of time is granted and the allocation of the site reflects that, for extraction at the site to occur, significant new capital investment would be required. The location of the site within the Nidderdale AONB means that any proposals for significant further development involving minerals extraction will need to satisfy the major development test set out in Policy D04 of the Joint Plan.
- 5.70 The proximity of designated internationally important nature conservation sites also means that Appropriate Assessment under the Habitats Regulations will be needed. Where applicable to the location, any planning application for future development will need to consider appropriately the impacts on the integrity of the internationally important nature conservation designations in accordance with The Conservation of Habitats and Species Regulations 2017. This may include the need to demonstrate potential "Imperative Reasons of Overriding Public Interest" (IROPI) subject to securing compensatory measures that ensure the overall coherence of the Natura 2000 network. Any development that would be likely to have a significant effect on a European site, either alone or in combination with other plans or projects, will be subject to assessment under the Habitats Regulations at project application stage. If it cannot be ascertained that there would be no adverse effects on site integrity the project will have to be refused or pass the tests of regulations 63 and 64, in which case any necessary compensatory measures will need to be secured in accordance with regulation 68. As a result of these major constraints, the acceptability of future development at Blubberhouses Quarry will be fully tested when the planning application (ref. NY/2011/0465/73) or any other relevant applications are determined.

- 5.71 There are only three Mineral Planning Authority areas in England that produce silica sand suitable for high quality glass manufacture: Norfolk and Surrey County Councils and Cheshire East Council. Supply also takes place from Fife in Scotland. Supply from Cheshire East is due to cease in 2016 with no new supply sources available. Sites within the other two MPAs in England with reserves of silica sand currently do not have a 10 year stock as required by national policy, although both are seeking to make future provision through their emerging land use plans which, if achieved, would enable supply to continue over a longer period should the market require. In both areas resources are constrained by a range of important environmental designations.
- 5.72 It is understood that silica sand is currently imported from a site in Norfolk to a glass manufacturer located in Selby District and to other glass manufacturers in the Yorkshire and Humber region. 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 available elsewhere within the Plan area, apart from in the vicinity of Blubberhouses.
- 5.73 Other important considerations include: the absence of alternative sources of potential supply outside the AONB; the economic benefits both locally and nationally in securing raw materials for industry; and the potential impacts of a reduced supply if supplies from outside the Joint Plan area were not available.
- 5.74 Overall the evidence suggests that there is significant uncertainty, beyond the short term, about the future supply situation nationally as well as an expectation that, in the near future, supply from England will be concentrated in the southern part of the country. There is potential for a shortage of supply in the medium to long term and as a result the longer-term significance of the high-quality silica sand resource at Blubberhouses is likely to increase. It is therefore appropriate to provide support in principle for the development of resources within the Blubberhouses site subject to taking account of the important constraints that exist in this location.
- 5.75 A further relevant consideration in respect of Blubberhouses Quarry is that the County Council (within its Local Transport Plan 4: strategy and strategic transport prospectus) and the York and North Yorkshire & East Riding Local Enterprise Partnerships (within its strategic economic plan) have identified the need to realign the A59 road at Kex Gill, near Blubber Houses Quarry, as a key strategic priority. The existing alignment of the A59 in the Kex Gill area is subject to poor land stability issues, resulting in several road closures taking place on this regionally important strategic trans Pennine route over the past 15 years. A definitive proposed realignment is not yet available and there is no safeguarded route. Work is currently on going identifying options, however there is potential for this project to overlap with the Blubberhouses Quarry site. In this scenario there would be a need to ensure that the potential for conflict between road realignment and the quarry is reflected in design of both schemes and the potential for any cumulative impact taken into account where necessary.

Clay

- 5.76 Potential resources of clay are widely distributed in the 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 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 the 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 Plan area are for brick manufacture (at Alne Brickworks) and for the manufacture of lightweight aggregate blocks (at the Plasmor site at Great Heck in Selby District, which is currently served by clay from the nearby Hemingbrough Clay Pit).

- 5.77 Deposits of brick clays also occur in the Heworth, Layerthorpe, Dringhouses and Acomb areas in the 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.

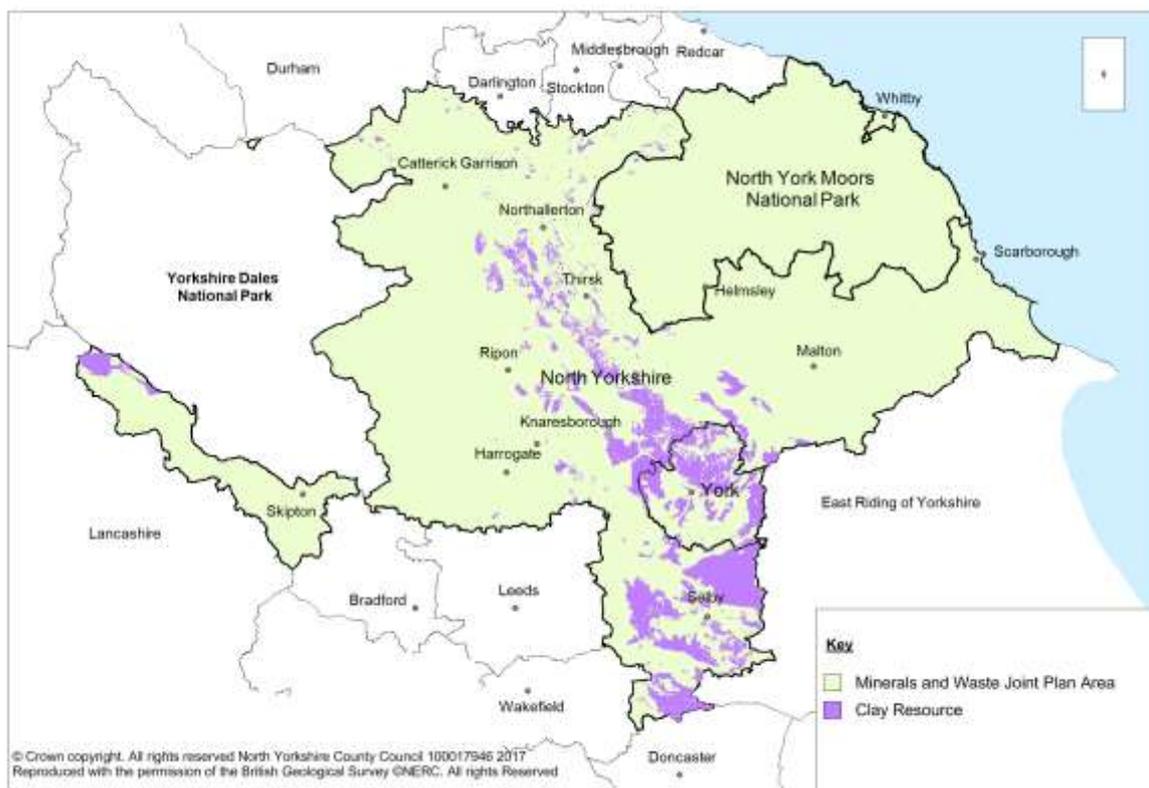


Figure 11: Clay resources in the Plan area

Policy M13: Continuity of supply of clay

1) The provision of sufficient permitted reserves of clay to provide a 25 year supply for existing manufacturing operations at Alne Brickworks and Plasmor Blockworks, Great Heck, is supported as follows:

- i) Allocation as shown on the Policies Map required in order to meet requirements during the Plan period:

Land to north of Hemingbrough clay pit (MJP45), in Selby District

- ii) Allocation as shown on the Policies Map potentially required to contribute to maintaining longer term supply for Plasmor Blockworks:

A Preferred Area on land adjacent to former Escrick Brickworks (MJP55), in Selby District

Development of reserves within this Preferred Area will only be permitted where it would follow the extraction of reserves within allocation MJP45 or it can be demonstrated that additional reserves are required 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.

- 2) Maintaining the supply of clay is also supported through identifying an allocated site as shown on the Policies Map for engineering clay at:**

Land to the west of Newlands Lane, Upper Poppleton (MJP52), in the City of York

- 3) Proposals for the development of sites allocated in 1) and 2) above will be required to take account of the key sensitivities and incorporate the necessary mitigation measures that are set out in Appendix 1.**
- 4) Working of unallocated brick clay resources will be permitted where it can be demonstrated that the mineral is needed to maintain an adequate supply to existing manufacturing facilities in line with national policy, where sufficient mineral cannot be provided from sites or preferred areas allocated in the Joint Plan and subject to compliance with relevant development management policies in the Joint Plan.**

Main responsibility for implementation of policy: NYCC , CYC and minerals industry

Key links to other relevant policies and objectives

M14, S01, D01, D02, D05, D06, D07, D09, D10

Objectives 5, 6

Monitoring: Monitoring indicator 13 (see Appendix 3)

Policy Justification

- 5.78 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 to provide 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.
- 5.79 Permission for an extension to Hemingbrough Quarry was granted in early 2016 but following discussions with the operator, it has been identified that further reserves of clay would be needed here 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 a future extension to Hemingbrough Quarry which is considered suitable for allocation in the Joint Plan. An area of land at Escrick, near York, adjacent to a former tileworks, has also been put forward by the operator to provide a longer term source of clay for the facility at Great Heck.
- 5.80 The site allocation at Hemingbrough is identified in the Joint Plan to help to meet the 25 year supply requirement for the Plasmor blockworks. This allocation provides a high level of certainty about the necessary resources being delivered. 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, to demonstrate how supply could be maintained if it is not practicable to provide sufficient reserves at the Hemingbrough site to meet the full 25 year national policy

requirement. There are a number of significant constraints on development at the Escrick site, including proximity to the Trans Pennine Trail, 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 to ensure protection of the environment, including historic environment, and local amenity. It is not expected that development of the whole of the Preferred Area would be acceptable under this policy.

- 5.81 An allocation for clay extraction is also identified at land to the west of Newlands Lane, York to help provide a local supply of clay for engineering purposes in the City of York area. This site is within the general extent of the York Green Belt and will remain in the Green Belt in York’s emerging Local Plan and development must therefore comply with national and local Green Belt policy.
- 5.82 Some further flexibility is also appropriate to ensure that other resources can be developed, if necessary, to meet the national policy requirement for the supply of clay to existing manufacturing facilities. This flexibility might be needed if it is not practicable to deliver the expected amount through the allocated sites or areas, or if the supply of clay of particular quality or having certain technical specifications which may not be available in other permitted sources is sought.
- 5.83 In all cases, any specific proposals will need to comply with relevant development management policies to protect the environment and local amenity and provide mitigation if required. 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.

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 permitted, where the incidental extraction of clay would help to ensure 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	
<i>M13, D01, D02, D03, D06, D07, D09, D10</i>	<i>Objective 5</i>
Monitoring: Monitoring indicator 14 (see Appendix 3)	

Policy Justification

- 5.84 In some mineral workings, particularly for sand and gravel and some crushed rock types, the primary mineral occurs alongside 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, for this to represent a sustainable form of mineral extraction, it will be important to ensure that removing incidental clay off-site would not significantly increase the overall environmental impacts compared with extracting the primary mineral, including in relation to reclamation and afteruse of the site. Clay materials are often retained on site and replaced in worked-out areas to help to 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.

Building Stone

- 5.85 Building stone includes material used for roofing, walling, flagstones or ornamental purposes. There are currently 15 active quarries supplying building stone in the 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 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.
- 5.86 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 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. The following table identifies active building stone sites in the Joint Plan area and the details of the stone extracted and uses.

Site name	Type of stone	Details of stone	Uses
Gatherley Moor Permitted Until 28 th February 2020	Sandstone	Alston sandstone – generally fine to medium grained, iron rich which gives an orange colour tinged with grey.	Building stone and used for flags and roofing tiles.
Grey Yaud Permitted until 20 December 2036	Sandstone	Lower follifoot grit – coarse grain buff coloured sandstone	Repair and renovation of local buildings
Carkin Moor Permitted until 31 July 2036	Sandstone	Alston sandstone – generally fine to medium grained, iron rich which gives an orange colour tinged with grey.	Building stone and used for flags and roofing tiles.
Melsonby Permitted until 3 December 2032	Limestone	Underset limestone – grey base containing white or crystalline fossils, also known as Swaledale Fossil Limestone	Building stone
Highmoor Permitted until 28 July 2021	Limestone	Lower magnesian limestone – fine to coarse grained, pale yellow-white	Quality building stone
Low Grange Permitted until 22 February 2042	Limestone	Underset limestone – grey base containing white or crystalline fossils, also known as Swaledale Fossil Limestone	Building stone
Went Edge Permitted until September 2023		Lower magnesian limestone – fine to coarse grained, pale yellow-white	Quality building stone
Brotherton Permitted until 31 December 2020	Limestone	Upper magnesian limestone – Fine to coarse grained, pale yellow-white	Field walls and farm buildings, also used as a source of lime.
Aislaby	Sandstone	Aislaby stone – medium to coarse grained, buff, yellow and brown in colour	Building stone, freestone, ashlar, farm

(Does not have a time limit, but has a resource limit instead)			buildings, walls and monumental sculptures
Lowther's Crag Permitted until 6 December 2022	Sandstone	Saltwick sandstone - medium to coarse grained, buff, yellow and brown	Slabs, freestone, ashlar, quoins, walling stone and rubble fill
Whitewall Quarry	Limestone	Coralline Oolite Formation	Building stone

Table 4: Active building stone sites in Joint Plan Area

- 5.87 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.
- 5.88 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 about 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

- 1) In order to secure an adequate supply of building stone, proposals will, where consistent with other policies in the Joint Plan, be permitted 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;**
 - iv) the opening of new sites for building stone extraction, 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 Joint Plan for working of building stone.**
 - vii) development for building stone products and processing activities including at appropriate locations functionally but not physically linked to an existing quarry;**
 - viii) where development is proposed in the National Park or an AONB under criteria i) to iv) above, and where the development comprises major development due to its scale and nature, proposals will need to meet the requirements for major development set out in Policy D04.**
- 2) 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 meeting particular requirements for building stone outside the area, such as**

geological matching. The scale of the proposal should be consistent with the identified needs for the stone.

- 3) Proposals for the supply of building stone from locations within the National Park or AONBs, will need to demonstrate that the stone is required to meet requirements arising from new build or repair work within the National Park and/or AONBs or is for the repair of buildings or structures which rely on the proposed source of stone as the original source of supply, or as providing a directly equivalent product which can no longer be provided from the original source supply, or is required to be sold out of the National Park or AONB so as to preserve the overall economic viability of the source quarry.
- 4) Additional reserves to help to maintain the supply of building stone are also provided through a site allocation as shown on the Policies Map for:

Land at Brows Quarry (MJP63) in Ryedale District.

Proposals for development at this site will be required to take account of the key sensitivities and incorporate the necessary mitigation measures that are set out in Appendix 1.

Main responsibility for implementation of policy: NYCC , CYC and minerals industry

Key links to other relevant policies and objectives

M10, I01, S01, D04, D08

Objectives 3, 6, 9

Monitoring: Monitoring indicator 15 (see Appendix 3)

Policy Justification

- 5.89 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 sensitive locations with the potential for impacts on the environment or local communities. It is therefore important that proposals can demonstrate compliance with other relevant policies in the Joint Plan. Proposals for sustainable stone processing at a quarry or at an existing stone recycling facility including; sawing, tooling and screening would need to demonstrate compliance with the development management and other infrastructure policies in the Joint Plan.
- 5.90 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 Joint 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.
- 5.91 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).

Existing quarries in designated areas are important in terms of preserving and enhancing the built character of the protected areas by providing geologically matching stone. Where it can be demonstrated that sale of stone outside the designated area is necessary to preserve the economic viability of an existing quarry which primarily supplies stone to the designated area, such sales to preserve economic viability will be supported.

- 5.92 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 export 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 Policy D04 of the Joint Plan.
- 5.93 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, limited extraction specifically to serve repair needs for adjacent existing historic structures or buildings will be supported in principle. There may be sites dealing with stone products that are not at existing quarries, which are nevertheless important for the supply of stone products to the plan area. It is therefore appropriate to support their ongoing development where there is compliance with the development management and other infrastructure policies in the Joint Plan.
- 5.94 In some cases, building stone is worked as an ancillary product at the same time as extracting crushed rock aggregate. Where suitable stone exists, this can be a sustainable form of development as it can contribute to the 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 so that appropriate mitigation can be considered if necessary.
- 5.95 Only two allocations of land for building stone extraction have been proposed during preparation of the Joint Plan. Of these, only one site (land at Brows Quarry MJP63) is considered suitable for allocation 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 Joint Plan.

Hydrocarbons (oil and gas)

Introduction

- 5.96 Since work started on the Joint Plan, there has been increasing public and commercial interest in issues associated with developing onshore shale gas resources. This is a highly relevant issue for the Plan area following the announcement in late 2015 of new oil and gas exploration and development licences (PEDLs) in the eastern part of the area (see fig. 12), as well as the approval in 2016 of proposals for hydraulic fracturing for shale gas at an existing well site near Kirby Misperton, in Ryedale District. Nevertheless, substantial uncertainties remain about the scale and distribution of any future proposals that could come forward. Around the time of finalisation of the Joint Plan, in November 2019, the Government imposed an effective moratorium on hydraulic fracturing by introducing a presumption against the issuing of any further Hydraulic Fracturing Consents, until compelling new evidence is produced which would address concerns about prediction and management of induced seismicity. A Written Ministerial Statement of 4 November 2019, accompanying the introduction of the moratorium, emphasised the Government's view that natural gas remains an important source of secure and affordable energy and that shale gas has a potential role in this. As the Joint Plan is intended to cover the period to 2030, the Authorities take the view that it is important to maintain local policy for shale gas development, so as to ensure that policy coverage is in place should the moratorium be lifted, but it will be necessary to keep under review both the need for, and scope of, these policies as explained in more detail in para 4.11.
- 5.97 The Oil and Gas Authority awards PEDLs to give exclusivity to operators who meet certain criteria to 'search and bore for and get' oil and gas resources, which are owned by the Crown. Whilst a key objective of the licensing process is to help ensure maximum exploitation of a national resource, the award of a licence does not confer any exemption from other legal and regulatory requirements. Compliance with a range of regulatory processes is required, including the need to obtain planning permission. Development Plans, including the Joint Plan, have statutory force under the Planning and Compulsory Purchase Act 2004 and applications for planning permission need to be determined in accordance with the Development Plan, unless there are material considerations which indicate otherwise. The licensing objective of maximising exploitation of the resource does not therefore override the role of the policies in the Joint Plan in setting out a local approach to this issue.

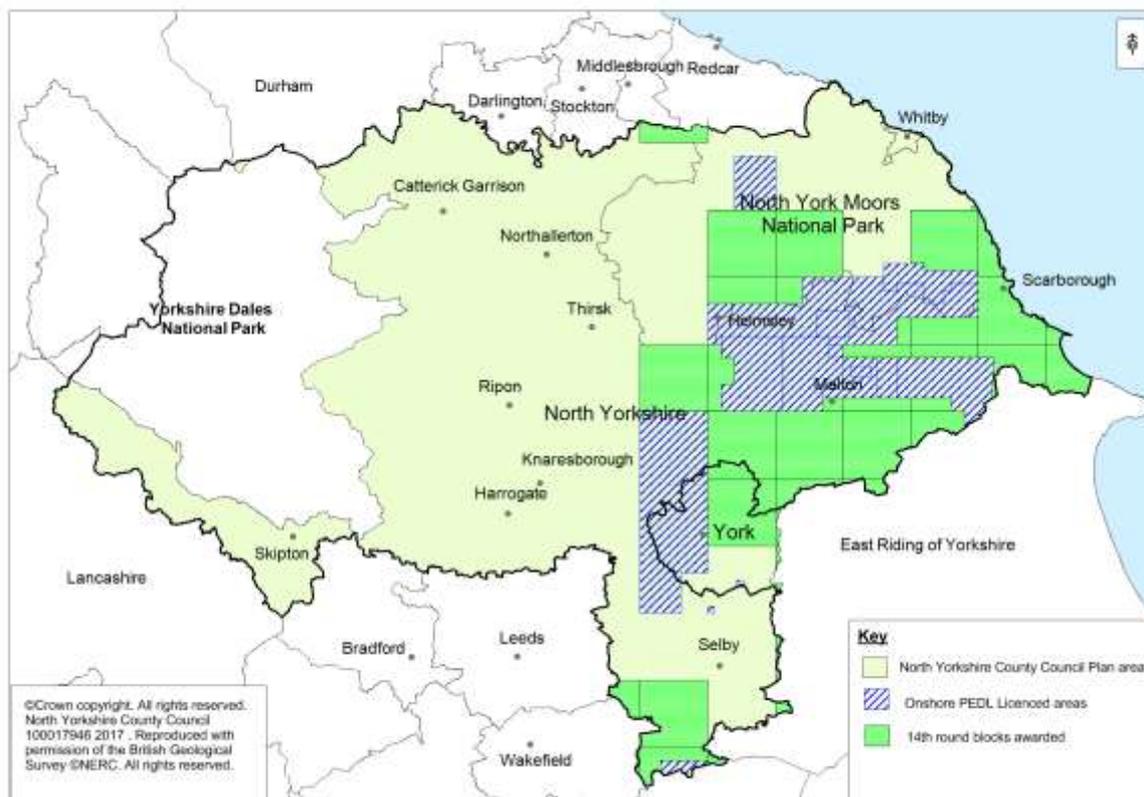


Figure 12: PEDL blocks and blocks announced in 14th licensing round (2015)

- 5.98 The expected increase in commercial interest in gas in the Plan area in future years, including shale gas, together with the highly sensitive nature of the environment in large parts of the area covered by new and existing PEDLs, presents a significant challenge. An appropriate balance has to be achieved between provision of a degree of support and flexibility to enable development to take place in appropriate locations, and the need to provide a high standard of protection to local communities and the environment. This section of the Joint Plan sets out a comprehensive range of policies that aim to achieve this balance.
- 5.99 The evolving picture in relation to onshore hydrocarbon development means that the policies in this section of the Joint Plan may need to be reviewed and updated in future (para. 4.11 identifies circumstances which may justify a review).

Hydrocarbons in the Plan area

- 5.100 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. There is no known oil resource in the Plan area but resources of gas are present and have been exploited over a substantial period of time. Recent geological information suggests there may be significant further resources of shale gas in the area.
- 5.101 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. Conventional gas was first discovered in the North York Moors in the 1940s. In the 1970s, gas was extracted from a wellhead in the National Park and processed at a site in Pickering, although this operation was only short lived as a result of water ingress. In the 1980s successful exploration wells

were drilled in the Vale of Pickering and in 1995 the Knapton gas power generation plant was commissioned, with gas being sourced from a number of well sites within the Vale, at Kirkby Misperton, Marishes, Malton, and Pickering. Production continues and the Vale of Pickering contains one of the larger onshore gas fields in the UK. More recently, further exploratory drilling for conventional hydrocarbons development has taken place within the National Park, with a view to extracting gas for transport via pipeline to the Knapton facility.

- 5.102 To date, exploration, appraisal and production of conventional gas resources in the Plan area, including within the National Park, have been carried out without giving rise to unacceptable impact on the environment and the onshore gas industry remains an established part of the local economy.
- 5.103 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 methane captured from coal mines, coal bed methane, underground coal gasification, as well as shale gas.
- 5.104 *Coal mine methane* is vented from active or disused underground mine workings following the natural accumulation of gas in the underground void. It is a relatively simple process typically involving collection and transfer of the gas to a generating engine, located at the surface, which burns the gas to produce electricity. Coal mine methane is currently used in this way in the Selby Coalfield, for example at the former Stillingfleet mine site in Selby district. *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. By drilling a network of wells the gas can be extracted from coal seams which have not been mined. The gas is typically 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 near Shipton by Beningbrough to the north of York in recent years, however there is no expectation that production will be brought forward in the foreseeable future. Development of coal bed methane can involve a requirement for multiple well pads and wells in order to access a sufficient volume of resource.
- 5.105 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 then 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 feed stocks. Substantial surface infrastructure can be associated with Underground Coal Gasification. Although resources of coal potentially suitable for underground coal gasification are likely to occur in the area, there is no known commercial interest in this source of gas at present.
- 5.106 *Shale gas* is found within organic-rich shale beds or other fine-grained rocks with low porosity, rather than in a conventional 'reservoir' of porous or permeable rock, 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 substantial depths (between 1500m and 4200m) below ground.
- 5.107 A recent British Geological Survey report 'The Carboniferous Bowland Shale Gas Study: Geology and Resource Estimation' (July 2013) identifies potentially suitable shale deposits (in both the Upper and Lower Bowland Hodder shales) which extend at depth right across northern England, as far north as a line approximately between Lancaster and Whitby. In particular it identifies prospective areas for gas in Ryedale,

Scarborough, Hambleton and Selby Districts, as well as the North York Moors and York. The exploitation of shale gas in the UK involves technologies such as hydraulic fracturing ('fracking')¹⁰.

- 5.108 Whilst permission for hydraulic fracturing of an existing gas well near Kirby Misperton was granted in 2016, there is still a high degree of uncertainty about the commercial viability of any resources in this area or the UK generally, and hence the potential scale or distribution of development activity that may come forward. This uncertainty is likely to prevail until further exploration activity has taken place.
- 5.109 However, shale gas has the potential to be an important new source of energy for the UK and the Government is currently encouraging further exploration. In autumn 2012 the Government announced an overall strategy for gas, to ensure that the best use is made of gas power, including new sources of gas under the land, in order to deliver a range of objectives including improved security of energy supply and as part of a transition towards use of lower carbon energy sources¹¹. In 2014 the Government published online Planning Practice Guidance entitled 'planning for hydrocarbon extraction'. It stated, amongst other matters, that "[a]s an emerging form of energy supply, there is a pressing need to establish - through exploratory drilling - whether or not there are sufficient recoverable quantities of unconventional hydrocarbons such as shale gas and coal bed methane present to facilitate economically viable full scale production". More recently, in September 2015, a Ministerial Written Statement by Government indicated that there is a national need to explore and develop shale gas in a safe, sustainable and timely way. A further Ministerial Statement on Energy Policy, published in May 2018, reaffirmed Government's view on the national importance of shale gas and their support for the principle of shale gas development, and signalled an intention to create the world's most environmentally robust onshore shale gas sector. Government subsequently advised, in a further Written Ministerial Statement of May 2019, that policy for onshore oil and gas, including references to the local and national importance of unconventional oil and gas and the need to give weight to the benefits of mineral extraction, contained in the Statements of September 2015 and May 2019, remain extant. A Written Ministerial Statement in November 2019 reiterated the Government's view that natural gas remains an important source of secure and affordable energy and that shale gas has a potential role in this. The context to the Statements of May and November 2019 is explained in more detail in the next paragraph.
- 5.110 National planning policy for shale gas has continued to evolve during the later stages of preparation of the Plan. NPPF 2018 paragraph 209a indicated that MPAs should recognise the benefits of onshore oil and gas development, including unconventional hydrocarbons, for the security of energy supplies and supporting a transition to a low carbon economy; and put in place policies to facilitate their extraction. This paragraph was subsequently quashed following legal proceedings. The High Court judgment leading to the quashing of NPPF 209a made reference to the failure by Government to consider the implications of evidence produced in objection to the proposed policy, which contended that the evidence on greenhouse gas emissions from shale gas development relied upon to support the policy was flawed. The MPAs take the view that the evolving national policy position and the evolving evidential basis for the claimed carbon benefits of shale gas development, justify a precautionary approach to relevant local planning policies for this form of

¹⁰ In some circumstances hydraulic fracturing techniques can also be applied in the development of conventional gas sources, for example for purposes of well stimulation to increase the yield of gas. See para. 5.114 for a description of the hydraulic fracturing process.

¹¹ Provision of policy support for the minimisation of greenhouse gas emissions as part of the sustainable design, construction and operation of minerals and waste development is addressed in Policy D11 in Chapter 9.

development, and reinforce the justification for their commitment to keep this matter under close review, as referenced in paragraphs. 4.10 and 4.11 of the Plan.

- 5.111 Further significant developments in the wider regulatory context to shale gas development took place in November 2019, with the announcement by Government of a presumption against the issuing of any further Hydraulic Fracturing Consents, until compelling new evidence is provided which would address concerns around the prediction and management of induced seismicity. Nevertheless, an Energy Update Written Statement of 4 November 2019, accompanying the introduction of the moratorium, emphasised the Government's view that natural gas remains an important source of secure and affordable energy and that shale gas has a potential role in this.

Summary of the process of hydrocarbon development

- 5.112 There are three main phases of onshore hydrocarbon development identified in national planning guidance: exploration, appraisal and production, as summarised below. Development relating to each of these main phases falls within the scope of the Policies in the Joint Plan. However, the distinctions between the phases may not always be clear cut. For example, hydraulic fracturing for unconventional gas can be associated with each of the main phases.

- *Exploration* - seeks to acquire geological data to establish whether hydrocarbons are present. It may involve 2-dimensional or 3-dimensional seismic surveys, exploratory drilling, well testing and completion 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 activity may take considerably longer, especially if hydraulic fracturing¹² is involved and, in the case of coalbed methane, removal of 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 commercially 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 size of the resource and its potential productive life. The size and complexity of the hydrocarbon reservoir involved will be important in determining the approach taken.
- *Production* - normally involves the drilling of a number of wells at one or more well pads. These may be at well pads used at the exploratory and/or appraisal phases of hydrocarbon development, or from one or more new well pads. Associated equipment and infrastructure, such as pipelines and processing facilities needed to clean or compress or store gas may also be required. Production can be up to around 20 years. The production stage may involve re-fracturing of existing wells and is likely to require the periodic maintenance of wells, which may require use of drilling equipment.

- 5.113 The following diagram illustrates the main regulatory approvals required, taken from of the online Planning Practice Guidance. Please note that the referenced to 'DECC' in Figure 13 should now be read as references to the Department for Business,

¹² See para. 5.114 for a description of the hydraulic fracturing process

Energy and Industrial Strategy (DBEIS) as its successor. Further details of other relevant regulatory regimes are discussed later.

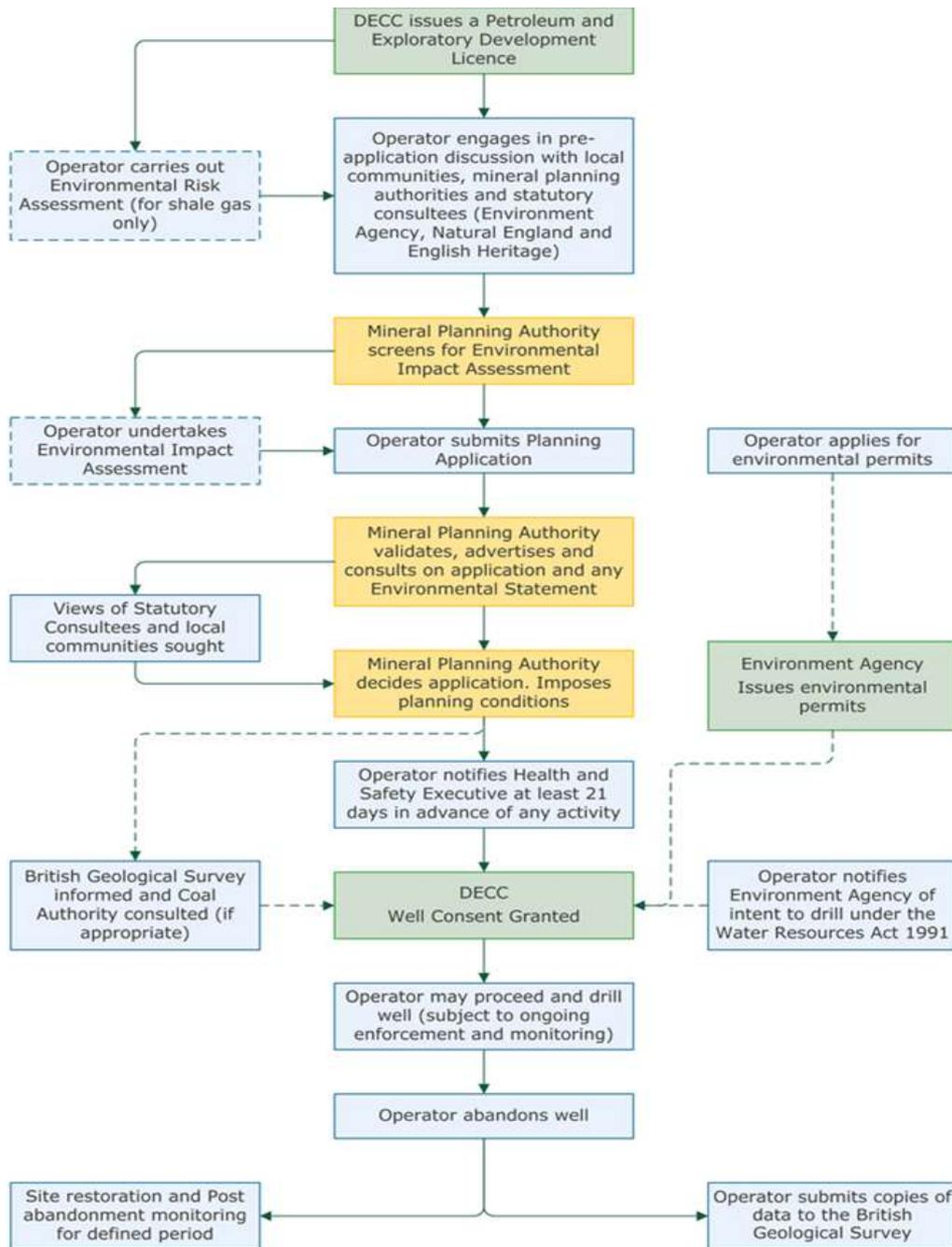


Figure 13: Outline of process for drilling an exploratory well

5.114 With all hydrocarbon appraisal or production, whether conventional or unconventional, a well is drilled and a number of steel casings are set in cement to seal and help prevent any contamination of 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 then accessed through hydraulic fracturing (fracking). This involves injecting the rock with liquid at high pressure to generate or widen small fractures. 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 to groundwater. 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.

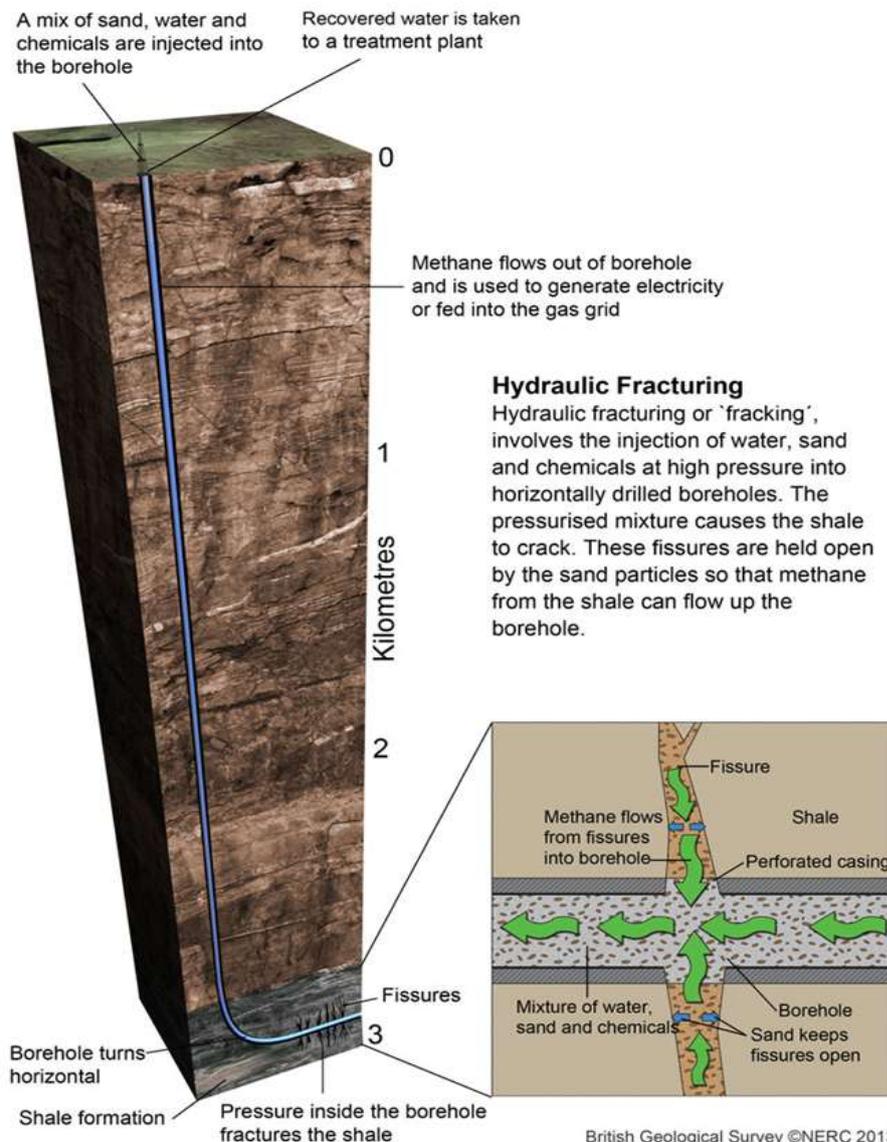


Figure 14: Hydraulic fracturing

- 5.115 Proposals for drilling and hydraulic fracturing, like most forms of oil and gas development, including associated processing facilities, require planning permission before development can take place. A range of other regulatory processes are also involved. The United Kingdom Onshore Oil and Gas Group (UKOOG), which represents the industry, 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 three main stages of operations. The Mineral Planning Authorities will expect applicants who are members of UKOOG to comply with these commitments when bringing forward proposals.
- 5.116 A range of issues are likely to be relevant when considering planning applications for hydrocarbon development. For example there is the potential for landscape and visual impact, impacts from noise, vibration, external lighting, flaring and traffic, and

impacts on the natural environment. These issues should be considered in the planning system given that its function is to control the use and development of land and ensure that new development is appropriately located. Hydrocarbon development typically involves temporary and intermittent activity particularly during the early stages of development. Depending on the nature of the development, it is likely that there will generally be a lesser degree of activity during any production phase.

- 5.117 Particular concerns have been expressed about other potential impacts of the hydraulic fracturing techniques used in extraction of shale gas and some other forms of hydrocarbons development. These include matters such as pollution of ground and surface water, use of water resources and management of waste water, air pollution and the potential for ground movements (i.e. earth tremors) to be triggered. Whilst Public Health England has indicated that it does not consider that a properly regulated industry would be likely to give rise to significant risks to health, the potential for various effects on health and well-being is a key concern to local communities. The focus of the planning system is on whether the development itself is an acceptable use of the land. Other regulatory regimes (see below) are relevant to the detailed control of matters such as sub-surface environmental pollution, induced seismicity, borehole design and construction and health and safety. The Environment Agency has an important regulatory role in relation to the management of returned water and Naturally Occurring Radioactive Materials (NORM). In accordance with Government advice, the Minerals Planning Authorities will assume that these other regimes will operate effectively. However, where matters subject to regulation through other regimes also give rise to land use implications, the Authorities will seek to address them through the planning process.
- 5.118 In a number of cases PEDL areas straddle mineral planning authority boundaries, both within or across the boundary of the Plan area (for example a number of individual PEDL areas contain land within both North Yorkshire or York and the East Riding). This gives rise to the potential for the submission of a planning application either in close proximity to the boundary of the Plan area, or which directly straddles a boundary between adjacent mineral planning authority areas. Where proposals have the potential to impact on more than one mineral planning authority area, the determining mineral planning authority will consult with the adjacent authority as necessary and in accordance with relevant development management procedures.

Other regulatory regimes

- 5.119 Each proposed development is assessed by the Environment Agency, which regulates discharges to the environment, issues water abstraction licences, and acts as a statutory consultee in the planning process. The Environment Agency has issued guidance which notes that an environmental permit will be required for matters such as the emission of waste gasses and the disposal of waste 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.
- 5.120 All drilling operations are subject to notifying the Health and Safety Executive, which will check operators' plans, assess engineering designs and reports and be responsible for checking sites to ensure they meet the requirements of the relevant legislation. The Health and Safety Executive requires that an independent well examiner reviews the design of the well before drilling begins and subsequently monitors its' construction and operation. The drilling operations are also regulated by the Oil and Gas Authority who will approve each stage of the progression of the well through their WONS system (Well Operations Notification System).

- 5.121 A key public concern in relation to hydraulic fracturing is the risk of earth tremors. The responsibility for giving final consent for drilling lies with Oil and Gas Authority, who must review the operator's hydraulic fracture plan to minimise the risk of seismic activity. 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 states that "*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*".
- 5.122 In 2012 DECC (now DBEIS) 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 DBEIS a plan of operations, starting with small test fractures before main operations and install real-time monitoring based on a traffic light system. Operators must stop and investigate if they detect tremors above the normal range. Further guidance on the regulation of hydrocarbons proposals is set out in the DECC publication 'Onshore Oil and Gas Exploration in the UK: regulation and best practice (England) (December 2015). A diagram illustrating the 'traffic light' system is provided below. Notwithstanding the introduction of this system, in 2018 and 2019 hydraulic fracturing of wells at the Preston New Road Site, also near Blackpool, gave rise to further induced seismicity, culminating in a magnitude 2.9 event in August 2019 which was widely felt, and reportedly caused damage to property in the area. An interim report by the Oil and Gas Authority into the 2018 seismic activity at Preston New Road concluded that, on the basis of current evidence, it cannot evaluate with confidence whether a proposal to resume hydraulic fracturing in the area, or to start operations elsewhere, will not cause unacceptable levels of seismicity. This led to the announcement by Government in November 2019 of the introduction of a presumption against issuing any further Hydraulic Fracturing Consents, until compelling new evidence is provided which addresses the concerns around the prediction and management of induced seismicity.



Figure 15: DBEIS traffic light system for regulation of hydrocarbons

5.123 Planning guidance and case law makes clear that Minerals Planning Authorities do not need to focus on the control of processes or emissions themselves where these are subject to approval under pollution control regimes. It states that they can determine applications having considered the advice of the relevant regulatory bodies without having to wait for the other approval processes to be concluded.

Definitions

5.124 To ensure that the local policy approach to hydrocarbon development is as clear as it can be, it is helpful to define some key words and concepts that will be used by the Mineral Planning Authorities when implementing the Joint Plan:

- a) 'Hydrocarbon development' includes all development activity associated with exploring, appraising and/or producing hydrocarbons (oil and gas), including both surface and underground development.
- b) 'Surface hydrocarbon development' and 'surface proposals' includes use and/or development of the land surface for the purposes of the exploring, appraising and/or producing hydrocarbons.
- c) 'Sub-surface hydrocarbon development' and 'sub-surface proposals' includes development taking place below the ground surface for the purposes of exploring, appraising and/or producing hydrocarbons.
- d) 'Conventional hydrocarbons' include oil and gas found within geological 'reservoirs' with relatively high porosity/permeability
- e) 'Unconventional hydrocarbons' include hydrocarbons such as coal bed and coal mine methane and shale gas, as well as the exploitation of in situ coal seams through underground coal gasification.
- f) For the purposes of the Plan 'hydraulic fracturing' includes the fracturing of rock under hydraulic pressure regardless of the volume of fracture fluid used.
- g) In planning terms it is considered that the relevant distinctions can be drawn between the specific nature and/or scale of activities associated with certain stages of development for conventional hydrocarbons and those used for unconventional hydrocarbons. These differences may include the potential requirement for a larger number of well pads and individual wells, the volume and pressures of fluids used for any hydraulic fracturing processes and the specific requirements for any related plant and equipment and the management of related wastes.

Policy M16: Key spatial principles for hydrocarbon development

Hydrocarbon development of the types identified below should be located in accordance with the following principles:

- a)
 - **exploration, appraisal and production of conventional hydrocarbons, without hydraulic fracturing;**
 - **exploration for unconventional hydrocarbons, without hydraulic fracturing:**

Proposals for these forms of hydrocarbon development will be permitted in locations where they would be in accordance with Policies M17 and M18 and, where relevant, part d) of this Policy.

- b)
 - **Exploration, appraisal and production of conventional hydrocarbons, involving hydraulic fracturing;**
 - **Exploration for unconventional hydrocarbons, involving hydraulic fracturing;**
 - **Appraisal and/or production of unconventional hydrocarbons (other than coal mine methane):**
 - i) **Surface proposals for these forms of hydrocarbon development will only be permitted where they would be outside the following designated areas: National Park, AONBs, Protected Groundwater Source Areas, the Fountains Abbey/Studley Royal World Heritage Site and accompanying**

buffer zone, Scheduled Monuments, Registered Historic Battlefields, Grade I and II* Registered Parks and Gardens, Areas which Protect the Historic Character and Setting of York, Special Protection Areas, Special Areas of Conservation, Ramsar sites and Sites of Special Scientific Interest.

- ii) Sub-surface proposals for these forms of hydrocarbon development, including lateral drilling, underneath the designations referred to in i) above, will only be permitted where it can be demonstrated that significant harm to the designated asset will not occur. Where lateral drilling beneath a National Park or AONBs is proposed for the purposes of appraisal or production, this will be considered to comprise major development and will be subject to the requirements of Policy D04.
- iii) Surface and sub-surface proposals for these forms of hydrocarbon development will also be required to be in accordance with Policies M17 and M18. Surface proposals will also, where relevant, need to comply with Part d) of this Policy.

c) Coal mine methane:

Proposals for production of coal mine methane resources will be supported where any surface development would be located on industrial or employment land or within the developed surface area of existing or former coal mining sites.

d) Additional criterion applying to surface hydrocarbon development:

- i) Where proposals for surface hydrocarbon development meet other locational criteria set out in this policy but fall within a National Park or an AONB or the associated 3.5km visual sensitivity zone around these areas, as identified on the Policies map, or where located beyond this zone, are otherwise considered to have the potential to cause significant harm to a National Park and/or AONB, applications should be supported by a detailed assessment of the potential impacts on the designated area/s, unless it can be demonstrated that such an assessment is not required taking into account the particular locational circumstances of the proposed site relative to the designated area/s. Where detailed assessment is required this should include an assessment of views of and from the designated area/s from significant view points and an assessment of the cumulative impact of development in the area. Permission will not be granted for such proposals where they would result in unacceptable harm to the special qualities of the designated area/s or are incompatible with their statutory purposes in accordance with Policy D04.
- ii) Surface hydrocarbon development will only be permitted where the undeveloped character of defined Heritage Coast will be protected.

e) Conversion of well pads and wells for further or alternative forms of hydrocarbon development:

Where proposals are brought forward for the conversion of an exploration well pad or individual well to one to be used for appraisal and/or production purposes, or for the conversion of a well pad or individual well used for conventional hydrocarbons to one to be used for unconventional hydrocarbons, such proposals shall be subject to the spatial principles set out in this Policy as relevant.

Main responsibility for implementation of policy: NYCC , NYMNPA, CYC and District and Minerals industry	
Key links to other relevant policies and objectives	
<i>M17, M18, D01, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11, D12</i>	<i>Objectives 5, 6, 9, 10, 12</i>
Monitoring: Monitoring indicator 16 (see Appendix 3)	

Policy Justification

- 5.125 In December 2015 a substantial number of new PEDLs were announced, covering significant areas of Hambleton, Ryedale and Scarborough Districts, including areas within the North York Moors National Park and Howardian Hills AONB, as well as parts of the City of York and Selby District. It is expected that this announcement will lead to a new round of exploration activity in the area. A key difference compared with earlier activity is that there is expected to be a focus on shale gas as a target for exploration and, potentially, appraisal and development, in line with the Government's objective of stimulating commercial interest in this resource. Whilst a number of activities associated with shale gas development are similar to those associated with conventional hydrocarbon development, including the need for construction of a well pad and the operations involved in initial drilling of a well, there are also a number of significant differences. Examples include the potential for increased activity associated with the fracturing operations themselves, the expectation of the need to drill a number of horizontal wells from one or more well pads, the potential for high noise levels during periods of hydraulic fracturing activity, and increased traffic movements as a result of the need to bring in additional materials or water and remove waste materials. Other forms of unconventional hydrocarbons, particularly Underground Coal Gasification and coal bed methane, can also give rise to a need for substantial development activity at the surface as a result of the processes involved, particularly at appraisal or production stages.
- 5.126 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 Infrastructure Act 2015 has introduced a ban on hydraulic fracturing activity taking place anywhere at a depth less than 1000m below the ground surface. The Government has also set out through secondary legislation to the Infrastructure Act, which came into force on 6 April 2016¹³, that high volume hydraulic fracturing¹⁴ will not be supported beneath National Parks, AONBs, protected groundwater source areas and World Heritage sites, unless it would take place at a depth in excess of 1,200m below the surface. These controls do not remove the potential for lateral hydraulic fracturing at a greater depth under the National Park, AONBs or other protected areas, from surface locations beyond their boundary, or expressly prevent the possibility of surface development for the purposes of shale gas development, or development for other forms of unconventional hydrocarbons, in these areas. When considering the potential impact of a development on the special qualities of a National Park or AONB, reference to their special qualities can be found in the relevant Management Plan for the area. Whilst the specific qualities relevant to each protected landscape may differ from one another, they will all include qualities such as landscape and views, tranquillity, remoteness, dark night skies, biodiversity and geodiversity and rare species and heritage, and it is the combination of these qualities that led to these areas being designated and protected as National Parks and AONBs. As

¹³ The Onshore Hydraulic Fracturing (Protected Areas) Regulations 2016

¹⁴ For the purposes of the Plan the term 'high volume hydraulic fracturing' has the same definition as 'associated hydraulic fracturing', as defined via the Infrastructure Act 2015 (i.e. more than 1,000m³ of fracture fluid per frack or 10,000m³ overall).

such, development which would result in significant harm to the special qualities of a National Park or AONB will generally be resisted.

- 5.127 While the Infrastructure Act 2015 and secondary legislation address hydraulic fracturing which occurs underground, the Government has also introduced further restrictions, in the form of a prohibition on hydraulic fracturing operations from taking place from new or existing wells drilled at the surface in certain specified areas. The restrictions will principally affect surface development that is used for the carrying out of “associated hydraulic fracturing” the definition of which is contained in section 4B(1) of the Petroleum Act 1998. The Government has stated that, in addition, these restrictions will apply where an operator is required to get consent from the Secretary of State for hydraulic fracturing that is not “associated hydraulic fracturing”, and that the Secretary of State intends to require that such consent be obtained for operations which use more than 1,000 cubic metres of fluid at any single stage, or expected stage, unless an operator can persuasively demonstrate why requiring such consent would not be appropriate in their case. The areas protected through this means are National Parks, AONBs, World Heritage Sites, Groundwater Source Protection Zone 1, SSSIs, Natura 2000 sites (SPAs and SACs) and Ramsar sites. Although these areas all benefit from strong national planning policy protection in their own right, the restrictions do not, in themselves, constitute planning policy as they will be implemented through the oil and gas licensing regime.
- 5.128 The net effect of the existing restrictions would be to prevent subsurface development involving high-volume hydraulic fracturing at a depth of less than 1,000m below the surface anywhere in the Plan area, and at a depth of less than 1,200m below the surface in some highly protected areas (as indicated in para. 5.126). However, a range of other important types of designation would not be subject to similar legislative protection. Furthermore, whilst the surface restrictions will provide protection to a range of important designations, albeit not as a matter of planning policy, there are other types of sensitive areas that would not receive equivalent protection.
- 5.129 An additional consideration is that the new Regulations and surface restrictions will only apply to “associated hydraulic fracturing”. The Authorities have taken into account the WMS of May 2018 and recognise this statutory definition, and have paid due regard to Planning Practice Guidance. It is considered that whereas the definition in the Regulation applies to high volume hydraulic fracturing as defined, in terms of land use and the potential for impacts on the environment, local amenity and other relevant matters, impacts could occur at lower levels of activity.¹⁵ It is therefore not considered appropriate to distinguish in the Policy between high-volume hydraulic fracturing and fracking involving lower volumes of fracture fluid. This approach is reflected in the broader definition of hydraulic fracturing contained in paragraph 5.124 f) of the Plan. The definition of hydraulic fracturing used in the Plan is related to the PPG definition in that it does not rely on a minimum volumetric threshold. Similarly, it is considered that where hydraulic fracturing is proposed for the purposes of supporting the production of conventional gas resources, there is potential for this to give rise to a generally similar range of issues and potential impacts, although it is acknowledged that fracturing for stimulation of conventional gas production would be likely to involve generally lower volumes and/or pressures. In these circumstances whilst it is appropriate that such development is subject to the same policy approach. It is not the intention of the Mineral Planning Authorities to unreasonably restrict activity typically associated with production of conventional resources, which is a well-established industry in the Plan area. Where hydraulic fracturing is proposed in

¹⁵ As an example, the recently permitted hydraulic fracturing activity at the KM8 well site in North Yorkshire involves 5 separate fracks, only one of which would exceed the 1,000m³ threshold.

association with development of conventional hydrocarbons, the authorities will consider exceptions to the more restrictive approach set out in Policy M16 part b) where it is satisfied that, based on the circumstances of the specific proposal, it would not result in unacceptable impact on the protected area and full compliance with other relevant elements of the Plan can be demonstrated.

- 5.130 In view of the limited protection provided by existing and proposed legislation, as well as current uncertainty about the potential scale and geographical distribution of any commercial gas production that may be sought by industry, it is considered important that a comprehensive range of key environmental and other designations in the Plan area are afforded an appropriate degree of protection as a matter of local planning policy. The local policy needs to align with express Government policy on meeting national need and to ensure that the exploration and development of shale gas and oil resources is carried out in a safe and sustainable way meeting the highest environmental standards. This would help provide a clear, robust and consistent local approach by ensuring that their protection is incorporated within the statutory development plan. Such an approach acknowledges the very important contribution made by these designations to the overall character of the Plan area, the quality of its environment and its attractiveness to both residents and visitors. The development management policies in Chapter 9 of the Joint Plan, including Policies D04, D05, D06, D07, D08 and D09, also provide specific policy protection for these and other assets, and will need to be taken into account as relevant in the determination of planning applications. This includes the need to take account of any Impact Risk Zones identified by Natural England for SACs, SPAs, Ramsar sites and SSSIs, via the requirements of Policy D07 Biodiversity and geodiversity and impacts on the historic environment through the requirements of Policy D08 where relevant forms of surface or underground hydrocarbon development are proposed. Policy D11 also sets out requirements relating to the sustainable design, construction and operation of development, including minimisation of greenhouse gas emissions, consumption of water and generation of waste amongst other matters, in order to further reduce potential adverse impacts.
- 5.131 Mining operations and drilling at any depth would constitute “development” as defined in the Town and Country Planning Act 1990 (“development” means the carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land). Where horizontal drilling beneath a National Park is proposed from a location outside the Park, a ‘straddling’ application to both mineral planning authorities will be required in accordance with the Town and Country Planning Act 1990, Schedule 1, paragraph 1(1)(i). Such a development, which is likely to fall under EIA regulations, involves mineral extraction from a protected landscape and may be regarded as major development in combination with the wider surface development activity associated with it which could impact on the National Park environment itself. For example, emissions to air and ground and surface water close to the National Park could in turn result in ecological impacts in such a sensitive area, where there are important interactions between ground and surface waters and the heath and moor habitats, which are designated as Special Protection Areas and Special Areas of Conservation for both their vegetation and specific bird species they support. Further details on how proposals are assessed in terms of the major development test are set out in Policy D04.
- 5.132 A key factor leading to designation of an area as a National Park or Area of Outstanding Natural Beauty is the quality of its landscape. These areas benefit from a very high degree of protection in national policy, which states that major development within them should be refused unless there are exceptional circumstances and the development would be in the public interest. National Parks

and AONBs are very important in contributing to the overall environmental quality, distinctive character and rural economy of the Plan area, yet substantial areas of PEDLs are located in them. In some cases, development outside a National Park or AONB could have an impact on its setting, and conflict with the statutory purposes of its designation. A particular consideration is whether the scale, nature and location of a proposed development close to the designated area would detract from its special qualities. Tall elements of surface hydrocarbons development, such as drill rigs associated with exploration and appraisal, or production wells, may typically be 35-40m in height. Such equipment may only be present on site for relatively short periods, or potentially a number of months, or intermittently over a period of years at established well pads where successive wells are drilled or refracturing of existing wells takes place. However, where they would be located in close proximity to National Parks or AONBs, they have the potential to cause significant adverse impact on the setting of these important areas. This could include impact on important views to or from the National Park or AONB, or on the dark night skies typically associated with such areas as a result of the need for site lighting during 24-hour operations at some stages of development. Further justification for the protection of the setting of National Parks and AONBs is provided in paras. 9.26 and 9.27.

- 5.133 In order to ensure that National Parks and AONBs are provided with a degree of protection commensurate with their significance to the landscape and overall quality of the environment within the Plan area, proposals for surface hydrocarbons development within the visual sensitivity zone of the National Park or AONB should be supported by detailed information assessing the impact of the proposed development, including views into and out of the designated area. The Authorities consider that, for development outside the boundary of the designated area, such a requirement is most likely to apply within a 3.5km zone around the boundary, as defined on the Policies Map. This 3.5km zone is based on standard planning practice relating to assessment of landscape and visual impact for EIA purposes, where it may be justified to 'screen out' consideration of a 35m tall and relatively linear structure beyond a distance of 3.5km from the receptor. Whilst it is considered that a 3.5km zone is likely to be adequate to ensure that, in the large majority of cases, the potential for significant impacts is identified and considered, there may be particular circumstances, for example as a result of the local topography, that mean that similar information will be required in respect of proposals beyond the 3.5km zone. Similarly, the particular topography of the landscape surrounding the designated area in places may, within this 3.5km zone, effectively screen the development in views from or towards the designated area and in such cases, as well as cases involving small scale surface hydrocarbon development such as monitoring equipment, additional assessment and supporting information may not be required. Prospective applicants should seek advice from the relevant Mineral Planning Authority on this matter at pre-application stage.
- 5.134 Although the City of York is not protected in the same way as National Parks and AONBs, the historic character and setting of the City is a key reason for having designated the York Green Belt, one of only six cities in England where this reason applies, and the historic City as a whole does not benefit from any other specific national policy protection. The relatively flat and low lying landscape around York allows for long distance views of the Minster and other landmark buildings which are integral to the setting of the City. For these reasons, applicants will need to consider carefully the historic character and setting of the City when siting and designing proposals for surface hydrocarbons development within the City of York Green Belt. Where necessary, mitigation measures should be provided to prevent any unacceptable impact. Further details on the Green Belt can be found in Policy D05.

- 5.135 Areas of Heritage Coast have been defined in the Plan area. In these nationally defined non-statutory areas, local planning authorities are required to 'maintain the character of the undeveloped coast, protecting and enhancing its distinctive landscapes and improve public access to and enjoyment of the coast'. Such areas are therefore afforded a relatively high level of significance in national policy terms and it is appropriate to reflect this in the spatial approach. In some parts of the Plan area affected by PEDLs, areas of locally important landscapes have been identified in District and Borough local plans. Where these continue to form part of the statutory development plan, and are relevant to a proposal which falls to be determined by North Yorkshire County Council as Minerals and Waste Planning Authority, regard will be had to the requirements of any associated local plan policy.
- 5.136 Coal mine methane from former mine workings at Kellingley Colliery and within the Selby Coalfield is currently extracted in the Plan area and used to generate electricity. National planning policy encourages capture and use of this resource and it is appropriate to provide corresponding support in the Plan, through Policy M16 part c). It is likely that such development, which is small in scale, can be accommodated within surface sites associated with the former mine workings, or on industrial estates or employment land, and these are likely to remain the most appropriate locations for this form of development. However, where it is not practicable to access the resource from such a location then proposals in other locations will be considered in relation to the development management policies in Chapter 9 of the Plan.

Policy M17: Other spatial and locational criteria applying to hydrocarbon development

1) Accessibility and transport

- i) Hydrocarbon development will be permitted in locations with suitable direct or indirect access to classified A or B roads and where it can be demonstrated through a Transport Assessment that:

 - a) There is capacity within the road network for the level of traffic proposed and the nature, volume and routing of traffic generated by the development would not give rise to unacceptable impact on local communities¹⁶, businesses or other users of the highway or, where necessary, any such impacts can be appropriately mitigated for example by traffic controls, highway improvements and/or traffic routing arrangements; and**
 - b) Access arrangements to the site 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, including the needs of non-motorised users where relevant; and**
 - c) There are suitable arrangements in place for on-site manoeuvring, parking and loading/unloading.****
- ii) Where access infrastructure improvements are needed to ensure that the requirements of i) a) and b) above can be complied with, information on the nature, timing and delivery of these should be included within the proposals.**
- iii) Where produced gas needs to be transported to facilities or infrastructure not located at the point of production, including to any remote processing facility or the gas transmission system, this should**

¹⁶ For the purposes of interpreting this and other Policies in the Plan, the term local communities includes residential areas as well as residential institutions such as residential care homes, children's homes, social services homes, hospitals and non-residential institutions such as schools.

be via underground pipeline where practicable, with the routing of pipelines selected to have the least practicable environmental or amenity impact.

- iv) Where hydraulic fracturing is proposed, proposals, where practicable, should also be located where an adequate water supply can be made available without the need for bulk road transport of water.

2) Cumulative impact

- i) Hydrocarbon development will be permitted in locations where it would not give rise to unacceptable cumulative impact, as a result of a combination of individual impacts from the same development and/or through combinations of impacts in conjunction with other existing, planned or unrestored hydrocarbons development. Applications for appraisal and production activities should specifically address the potential for cumulative impacts of development upon climate change and where appropriate, propose such mitigation and adaptation measures as may be available and are consistent with Policy D11 and the requirements of other relevant regulators.
- ii) Well pad density and/or the number of individual wells within a PEDL area will be limited to ensure that unacceptable cumulative impact does not arise. Assessment of the contribution to cumulative impact arising from a proposal for hydrocarbon development will include (but not necessarily be limited to) consideration of:
 - a) The proximity of a proposed new well pad site to other existing, permitted or unrestored well pads, and the extent to which any combined effects would lead to unacceptable impacts on the environment or local communities, including as a result of any associated transport impacts;
 - b) The duration over which hydrocarbon development activity has taken place in the locality and the extent to which any adverse impacts on the environment or local communities would be expected to continue if the development were to be permitted;
 - c) The sensitivity of the receiving environment, taking into account the nature and distribution of any environmental constraints, proximity to local communities, the availability of adequate access links to the highway network and the need to ensure a high standard of protection in line with other relevant policies in the Plan.

Where results from any earlier exploration and/or appraisal activity are available, proposals for production of unconventional hydrocarbons should include information on how the proposal is intended to fit within an overall scheme of production development within the PEDL area and should ensure as far as practicable that production sites are located in the least environmentally sensitive areas of the resource.

- iii) In order to reduce the potential for adverse cumulative impact, proposals for production of hydrocarbons will be supported in locations where beneficial use can be made of existing or planned supporting infrastructure including, where relevant, pipelines for transport of gas and/or water, facilities for the processing or generation of energy from extracted gas and overhead or underground power lines and grid connections which could serve the development.
- iv) Where development of new processing, power or pipeline infrastructure is required, consideration should be given to how the location and design of the development could facilitate its use for multiple well pads in order to reduce adverse cumulative impact. The Minerals Planning Authority will support co-ordination between operators and the

<p>development of shared infrastructure where this will help reduce overall adverse impacts from hydrocarbon development.</p> <p>v) New processing or energy generation infrastructure for hydrocarbons should, as a first priority, be sited on brownfield, industrial or employment land. Where it can be demonstrated that development of agricultural land is required, and subject first to other locational requirements in Policies M16 and M17, proposals should seek to utilise land of lower quality in preference to higher quality.</p>	
<p>3) Local economy</p> <p>Hydrocarbon development will be permitted in locations where a high standard of protection can be provided to environmental, recreational, cultural, heritage or business assets important to the local economy including, where relevant, important visitor attractions. The timing of short term development activity likely to generate high levels of noise or other disturbance, or which would give rise to high volumes of heavy vehicle movements, should be planned to avoid or, where this is not practicable minimise, impacts and take into account seasonal variations and peaks in traffic movements.</p>	
<p>4) Specific local amenity considerations relevant to hydrocarbon development</p> <p>i) Hydrocarbon development will be permitted in locations where it would not give rise to unacceptable impact on local communities or public health. Adequate separation distances should be maintained between hydrocarbon development and residential buildings and other sensitive receptors in order to protect against unacceptable-adverse individual and cumulative impacts on amenity and public health, in line with the requirements of Policy D02. Proposals for surface hydrocarbon development, particularly those involving hydraulic fracturing, within 500m of residential buildings and other sensitive receptors, will only be permitted in following the particularly careful scrutiny of supporting information which robustly demonstrates how in site specific circumstances an unacceptable degree of adverse impact can be avoided.</p> <p>ii) Proposals should refer to any relevant data from baseline monitoring and other available information to ensure that a robust assessment of potential impacts is undertaken, and that comprehensive mitigation measures are proposed where necessary.</p> <p>iii) Proposals involving hydraulic fracturing should be accompanied by an air quality monitoring plan and Health Impact Assessment.</p> <p>iv) Proposals should include measures appropriate and proportionate to the development to manage waste gas emissions, including the capture and use of the gas where practicable, to ensure there is not an unacceptable impact on local communities or public health and to make practical use of any waste gas available.</p>	
<p>Main responsibility for implementation of policy: NYCC , NYMNPA, CYC and District and Minerals industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p>M17, M18, I02, D01, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11, D12</p>	<p>Objectives 5, 6, 9, 10, 12</p>
<p>Monitoring: Monitoring indicator 17 (see Appendix 3)</p>	

Policy Justification

- 5.137 The exploration and appraisal phases of oil and gas development may generate a significant number of heavy vehicle movements, mainly in the early or final stages where drilling and associated equipment is being installed or removed, or during phases when hydraulic fracturing operations are taking place. This sometimes requires abnormal loads to be transported. Large parts of the Plan area, including the majority of the area covered by PEDLs, are highly rural with a relatively sparse network of main roads. Rural roads often pass through local communities and, in many cases, have not been constructed to take a large volume of heavy vehicle movements. Vehicle movements also have the potential to impact on air quality, particularly in locations where Air Quality Management Areas have been identified and this will also be a relevant consideration in identifying suitable traffic routes, via a Transport Assessment. It is therefore important to ensure that development is located where there is good access to suitable road networks. This can help to ensure that traffic movements on unsuitable roads are prevented, that the flow of traffic on the highway is not impeded and that highway safety is maintained. The main road network in the Plan area comprises A and B classified roads and development should be located where suitable access to these routes can be obtained without harming the amenity of local communities and businesses. Proposals should include a Transport Assessment to demonstrate how suitable access will be achieved. Where a requirement for improved access infrastructure is identified, proposals to deliver this should be provided as part of the Assessment, including through the use of formal agreements under section 106 of the Town and Country Planning Act 1990 or section 278 of the Highways Act 1980, where appropriate.
- 5.138 Where produced gas needs to be transported off-site to remote processing facilities or other infrastructure, pipelines are the most appropriate method in order to minimise the need for vehicle movements and their associated impacts. As pipeline construction can itself give rise to adverse impacts, it is important that the need for new infrastructure is minimised and sharing of infrastructure is supported under part 2) iv) of this Policy. Where new pipelines are required, routes which seek to minimise any impacts on the environment or local amenity should be selected, recognising that there are a range of factors which can impact on this, including land ownership and economic factors as well as environmental constraints. Impacts from vehicle movements can be reduced by ensuring that development such as hydraulic fracturing, involving large volumes of water, is located where water can be supplied by means such as pipeline or directly from a suitable local source, without the need for road transport. This can be further supported by encouraging re-use or recycling of water where practicable and this is addressed in Policy M18.
- 5.139 The nature of hydrocarbon operations, 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 is done to access new areas of gas or stimulate the flow of gas in a given location, therefore helping to ensure maximum recovery of the resource and an appropriate return on investment on items such as processing infrastructure. As a result there may be commercial pressure to construct progressively more well pads and/or drill more wells on an existing pad, or re-fracture existing wells.
- 5.140 At this early stage in commercial interest in shale gas in the area, there is considerable uncertainty about the potential scale and distribution of development that could come forward. Indications are that a typical well pad would have a surface area of some 2ha and that the density of well pads per PEDL area would depend on factors including surface constraints and geological factors. It would be influenced by the outcome of further initial exploration activity in the area. Each well pad could be

expected to contain several individual well heads, from each of which a number of horizontally drilled wells would be drilled to access the shale gas resource, leading to the possibility of a substantial number of individual wells being drilled per pad. Such a scenario has the potential to lead to cumulative impacts as more development is proposed within an area, and to the potential for an incremental increase in impacts on the environment or local communities, including from traffic movements.

- 5.141 If further exploration leads to commercial interest in the production of shale gas in the Plan area, it is vital that a reasonable balance is found between developing the resource and protecting local communities and the environment. This is particularly so bearing in mind that PEDL areas are subject to a range of environmental constraints; are places where people live, work or visit and that they make an important existing contribution to the overall character, economic well-being and perception of the area.
- 5.142 Consequently, it will be very important to ensure that cumulative impacts that could arise through a proliferation of development are assessed and taken into account in considering proposals for hydrocarbon development. Whilst the current state of the evidence does not make it practicable to impose, at this stage in the development of the industry, a specific policy limit on the number of well pads or individual wells that may be acceptable in any particular area, or to specify a minimum separation distance that should be maintained between well pads, the policy sets out a range of criteria which will be used when assessing proposals which could give rise to cumulative impact.
- 5.143 To give an indication at this stage, however, it is considered unlikely that proposals which would lead to a total development density, including operational and restored sites, of more than 10 well pads per 100km² PEDL area would be compatible with the purpose of this element of the Policy¹⁷. Where an area being developed by an operator comprises a PEDL or licence block area of less, or more, than 100km² the density guideline will be applied pro-rata. For PEDLs located within the Green Belt or where a relatively high concentration of other land use constraints exist, including significant access constraints, a lower density and/or number may be appropriate. As PEDL boundaries are based purely on the OS grid and do not reflect other considerations, the location of existing or planned development in adjacent PEDL areas will also be considered in assessing cumulative impact under this Policy.
- 5.144 Where information is available as a result of exploration and/or appraisal activity in a PEDL area, operators should use this when putting forward specific proposals for production to set out, as far as practicable, how those proposals are expected to fit into an overall production scenario for the PEDL area, in terms of any further development that may be anticipated. Such information should refer to development that is anticipated over the whole of the PEDL area and take account of the entire likely duration of development activity. This can help to ensure that a strategic approach is taken to the development of the area, which includes directing development, as far as practicable, towards the least sensitive locations.
- 5.145 In assessing the potential for cumulative impact, account will be taken of the relationship between the proposed site and the location of other operational hydrocarbons development, the location of sites used for hydrocarbon development which are no longer operational but which have not yet been restored to an agreed condition or afteruse, and the location of other permitted but as yet unimplemented hydrocarbons development. Where a formal Environmental Impact Assessment is

¹⁷ Where a PEDL straddles the boundary of a National Park or an AONB then this guideline would be applied pro rata to the area of the PEDL falling outside the designated area.

required in respect of a specific proposal, the cumulative impacts of that proposal in combination with other development may also be required, depending on the circumstances of the individual case.

- 5.146 Accommodating any processing facilities and other supporting infrastructure, such as gas treatment, compressor or storage facilities, which may be needed to serve hydrocarbons development may be a challenge, given the predominantly rural nature of the Plan area and the scale and character of the development that could be involved. There are likely to be benefits therefore in locating new hydrocarbon development where it can use existing infrastructure, such as processing and distribution facilities, effectively, thus reducing the need for new development across the Plan area. This could help to reduce overall adverse impacts, including cumulative impacts. Consideration should therefore be given when locating development, and at the design stage, to the potential for the development to use suitable existing infrastructure, including infrastructure developed to serve activities carried out by other operators in adjacent PEDL areas, and developers should seek to deliver this where practicable.
- 5.147 Where new processing or other supporting infrastructure is required, consideration should be given to locating and designing this so that it would have the potential to serve multiple surface sites, potentially including those within the control of other operators. In support of this Policy the mineral planning authorities will encourage and facilitate discussion between PEDL holders or operators where necessary.
- 5.148 Where co-location or sharing is not practicable the priority should be for new facilities to be located on brownfield sites, industrial or employment land or, where the use of agricultural land is necessary, on land of lower agricultural quality in preference to higher quality land¹⁸ where practicable in order to ensure consistency with national policy and guidance.
- 5.149 Whilst hydrocarbon development has the potential to bring local economic benefits to the area, such as through employment and positive impact on the local service economy, there is also the potential for adverse impact on elements of the existing economy. Tourism and recreation are an important part of the wider economy in Ryedale, Scarborough and Hambleton Districts, in the North York Moors National Park and in the City of York. The quality of the natural environment, the opportunities for outdoor recreation and the cultural and heritage assets in the area all play an important part in attracting visitors. Furthermore, many local businesses in the area, including within the agricultural and manufacturing sectors, benefit from the current perception that they operate in a high-quality rural environment.
- 5.150 In some cases individual sites or locations important to the visitor economy are already designated for protection in law or policy. However, many are not and it will be important to ensure that, in determining proposals for hydrocarbons development in the area, consideration is given to the potential for adverse impact on the existing economy, including provision of appropriate mitigation measures where necessary.
- 5.151 It is acknowledged that some of the adverse impacts of hydrocarbon development can be of relatively short duration, or intermittent in nature. Examples include the need for increased heavy vehicle movements during the installation and removal of drilling equipment, or during phases where any hydraulic fracturing is taking place, and the need for 'workovers' at existing well sites. Where such activity is proposed in locations where there could be a significant impact on the visitor economy, proposals

¹⁸ i.e. not on land Grades 1, 2 and 3a within the DEFRA agricultural land classification system

should include consideration of whether the activity could be timed to avoid local school holiday periods.

- 5.152 Unlike other forms of minerals development currently taking place or expected in the Plan area, some phases of hydrocarbons development, such as the drilling of a well, require 24-hour operations. Such operations have acute potential to impact on local residents adversely, for example due to noise and light intrusion. This potential exists over much of the area that is currently subject to PEDLs, which is rural in nature, often with relatively low background noise levels, and relatively dark night skies. It is therefore important that locations for development are selected which will ensure adequate separation distances from residential property and other sensitive receptors. This would also help to ensure adequate protection from other potential impacts, such as emissions to air or water or induced seismicity. The significance of this latter issue has increased following the announcement by Government in November 2019 of an effective moratorium on hydraulic fracturing by introducing a presumption against the issuing of any further Hydraulic Fracturing Consents until compelling new evidence is provided which would address concerns around the prediction and management of induced seismicity. The adequacy of separation distances to properties and other receptors will need to be determined by the Mineral Planning Authority on a case by case basis but in all cases a robust assessment of potential impacts is required and a high standard of effective mitigation provided where necessary. The Authorities consider that the potential for adverse impacts to arise will tend to increase with greater proximity to sensitive receptors and that proposals within 500m of sensitive receptors are generally likely to create higher risks of harmful impacts on amenity. Such development will generally require especially careful scrutiny of existing conditions, potential impacts and the effectiveness of proposed mitigation measures during consideration of any planning application. The Authority will accordingly expect applications to be supported by more detailed and rigorous information in all these cases, which demonstrates that development can take place acceptably within this distance from sensitive receptors. A 500m distance from the well pad boundary (excluding site access) is considered to represent a reasonable distance of immediate sensitivity taking into account the potential for a complex range of individual and cumulative impacts on amenity and public health, comprising noise, vibration, lighting and light pollution and visual impact, including impacts arising from potential mitigation measures. Disturbance during the night time periods (23:00 – 7:00) has the potential for a greater degree of perceived impact. To the extent that other factors, relating to emissions to air or ground and surface water, or the potential generation of induced seismic activity, are relevant, these will also be taken into account. For the purpose of interpreting this approach, the term 'sensitive receptor' comprises residential dwellings and institutions such as residential care homes, children's homes, social services homes, hospitals and non-residential institutions such as schools.
- 5.153 In considering appropriate noise limits at sensitive receptors, operators will as a minimum be expected to meet the required limits set out in the NPPF and national Planning Practice Guidance, with the objective of ensuring a high standard of protection for local amenity. Site lighting should be designed and located to ensure minimum light spillage beyond the site boundary.
- 5.154 A further specific consideration associated with hydraulic fracturing is the possibility of induced seismicity. This has the potential to impact local amenity adversely and can be a significant concern to local communities. Furthermore, the Plan area contains a wide range of historically important buildings, which may be more vulnerable to damage from induced seismicity than more modern structures. It will be important to ensure that development which could give rise to induced seismicity is located in areas of suitable geology. Government indicated in an Energy Update

Written Statement in November 2019 that the causes of seismicity are highly dependent on local geology and that the limitations of current scientific evidence means it is difficult to predict the probability and maximum magnitude of any seismic events. Proposals should therefore be supported by compelling evidence which demonstrates that induced seismicity can be managed and mitigated to an acceptable level. This should include information which demonstrates the known location of any faults and an assessment of the potential for induced seismicity to occur as a result of the proposed development. Operators will be expected to apply the DBEIS traffic light system (see Fig.15) during their operations.

- 5.155 The potential for emissions to water or air is also a key issue, particularly for proposals involving hydrocarbon development. Although these are primarily matters controlled by other regulators (see below), they may have implications for the use and development of land, and local communities may be concerned about the potential for adverse impacts on health, which is also a relevant consideration in planning. Where proposals are put forward for development involving hydraulic fracturing, an air quality monitoring plan should be included. This should set out the measures to be taken to monitor air quality in the vicinity of the site, including the parameters to be monitored (to include parameters which relate to vehicle movements), the locations for monitoring and arrangements for reporting of results. A Health Impact Assessment should also be provided as part of an Environmental Impact Assessment, utilising any relevant data arising from baseline monitoring, including air quality monitoring and from other sources. This assessment should identify any likely significant health impacts, any mitigation and also identify proposals for further monitoring.
- 5.156 A range of other impacts associated with hydrocarbon development have the potential to cause impact on local amenity, and further policy on this matter is contained in Policy D02, which will be applied as relevant when considering proposals for all forms of minerals and waste development activity. The requirements of Policy D11 relating to the sustainable design, construction and operation of development will also need to be considered, in order to help ensure that greenhouse gas emissions, water consumption and generation of waste are minimised. This should include measures to manage waste gas emissions and include the capture and use of the gas as energy, so as to achieve a green completion where practicable.
- 5.157 Hydrocarbon development is subject to a range of other regulatory regimes which provide control over certain aspects of the operations. These are administered by organisations such as the Environment Agency, the Health and Safety Executive and the Oil and Gas Authority. National planning guidance is clear that planning authorities should not seek to duplicate these controls, and should assume that other regulatory regimes will operate effectively. The mineral planning authorities will therefore seek to work effectively with other regulatory bodies to ensure that a robust approach is taken to protect the environment and local amenity, recognising that issues relevant to the use and development of land are matters for the planning system.
- 5.158 If significant environmental impacts are likely the minerals planning authority will require the applicant to undertake an Environmental Impact Assessment (EIA). It is established in law that 'projects' cannot be sub-divided 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.

Policy M18: Other specific criteria applying to hydrocarbon development

1) Waste management and reinjection wells

- i) Proposals for hydrocarbon development will be permitted where it can be demonstrated, through the submission of details relating to the management of waste water, that adequate capacity exists and adequate arrangements can be made for the management or disposal of any returned water and Naturally Occurring Radioactive Materials arising from the development. Proposals should, where practicable and where a high standard of environmental protection can be demonstrated, provide for on-site management of these wastes through re-use, recycling or treatment. Where off-site management or disposal of waste is required, proposals should demonstrate that adequate arrangements can be made for this. Where new off-site facilities are proposed in the Plan area for the management or disposal of waste arising from hydrocarbons development, these should be located in accordance with the principles identified in Policies W10 and W11.
- ii) Proposals for development involving re-injection of returned water via an existing borehole, or the drilling and use of a new borehole for this purpose, will only be permitted in locations where a high standard of protection can be provided to ground and surface waters; they would comply with all other relevant requirements of Policy M16 and M17 and where it can be demonstrated that any risk from induced seismicity can be mitigated to an acceptable level.

2) Decommissioning and restoration

Proposals for hydrocarbon development will be permitted where, subject to other regulatory requirements, it can be demonstrated that:

- i) Following completion of the operational phase of development, notwithstanding the requirements and obligations under any other regulatory regimes, any wells will be decommissioned, insofar as this involves the complete removal of any associated surface development, so as to both prevent the risk of any contamination of ground and surface waters and emissions to air and ensure the proper restoration and after-care of the site; and
- ii) All plant, machinery and equipment not required to be retained at the site for operational purposes would be removed and the land restored to its original use or other agreed beneficial use within an agreed timescale.
- iii) For unconventional hydrocarbon development, the Mineral Planning Authority may require provision of a financial guarantee, appropriate to the scale, nature and location of the development proposed, in order to ensure that the site is restored and left in a condition suitable for beneficial use following completion of the development.

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

Key links to other relevant policies and objectives

M17, M18, S01, S05, D01, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11, D12, W08

Objectives 5, 6, 9, 10, 12

Monitoring: Monitoring indicator 18 (see Appendix 3)

Policy Justification

- 5.159 A significant issue with hydrocarbon development, particularly development involving hydraulic fracturing, is the need to manage the various forms of water that may be returned to the surface via a borehole. This can include water originally held within the rock (known as formation water) and, where hydraulic fracturing is involved, a proportion of the fracture fluid which returns to the surface via the borehole, known as flowback fluid. At production stage produced water arising as condensate in the gas can also occur. Water constituting waste and requiring management as waste can arise in substantial volumes and may contain Naturally Occurring Radioactive Materials (NORM) and other contaminants. It may be practicable to prepare waste water on site for re-use, through cleaning it, or subject it to other reprocessing so that it can be recycled. Relevant processes can include filtration, disinfection, oxidation, sterilisation, sedimentation and electrocoagulation. It may also be practicable to treat some waste at the site prior to any requirement for off-site disposal.
- 5.160 Provided a high standard of environmental protection is maintained to prevent spillage that could result in contamination of surface or groundwater, on-site preparation for re-use, recycling or treatment is likely to represent the most sustainable option, minimising the need to transport waste and promoting increased re-use or recycling in line with waste policy objectives in the Joint Plan. Where this is not practicable or appropriate, then off-site treatment or disposal will be required. The need for appropriate management of waste water is an important consideration for these forms of development, given the potentially large volumes that could arise. Proposals which would generate waste water should therefore be supported by a waste water management plan, identifying the measures proposed, including any off-site arrangements, to ensure the safe and sustainable management and transport of the waste in order to minimise risks to local communities or the environment. Further information on the protection of ground and surface waters, including the requirements of the Water Framework Directive, is provided in Chapter 9 in the section on the Water Environment.
- 5.161 Evidence suggests that there are a small number of existing facilities in and around the Yorkshire and Humber area which may be able to receive such waste, and these are likely to represent the nearest appropriate installations for management of this form of waste. However, it is possible that if hydraulic fracturing activity develops on a significant scale, either inside or outside the Plan area, there will be a need for further development of suitable waste management infrastructure. At this stage it is not practicable to assess in any detail the likely scale or location of the capacity that could be required. However, the existing waste policies in Chapter 6 of the Joint Plan, particularly relevant elements of Policies W10 and W11, provide a basis for considering any applications for the development of local capacity if required.
- 5.162 Reinjection of water down existing wells, or new wells drilled specifically for this purpose, is sometimes proposed as a disposal method and is most likely to be appropriate for water which does not contain returned flowback fluid, given that such fluid poses a pollution risk. Whilst the Environment Agency has indicated that reinjection of flowback fluid is not necessarily prohibited, it currently takes the view that a precautionary approach should be applied and that this method of disposal does not represent the Best Available Technique. This part of Policy M18 will therefore need to be implemented taking into account the position of other relevant regulators, particularly the Environment Agency, at the time any planning application is being considered. Whilst in some circumstances reinjection of water may be an appropriate means of helping to manage waste without the need for off-site transport, it will be particularly important to ensure that it would only take place where a high standard of protection can be provided to ground and surface water resources. A specific issue sometimes associated with this form of development is the potential for

re-injected water to act as a trigger for the activation of geological fault movements, potentially leading to induced seismic activity (earth tremors). Proposals for this form of development should therefore be supported with detailed information on the underlying geology of the site and an assessment of the potential for induced seismicity, together with any proposed mitigation.

- 5.163 Hydrocarbon development can be of relatively short duration (i.e. several weeks or months) or, in the case of production of an oil or gas field, can last up to some 20 years. Whatever the duration of the development, it is important to ensure that applicants provide an appropriate level of detail, at the outset, on how it is intended to decommission and restore the site to a beneficial afteruse. This should include information about the dismantling of equipment and clearance of the site surface, the decommissioning of any wells to prevent the risk of contamination of ground or surface waters or any emissions to air; and how the site will be restored to an appropriate after use when operations cease, in accordance with relevant elements of Policy D10 'Reclamation and Afteruse', within a specified timescale. As stated above other regulators also play a role in ensuring that decommissioned sites would not pose a risk as a result of pollution of ground or sub surface waters or emissions to air.
- 5.164 Unlike development of conventional gas resources, or indeed a range of other forms of minerals development, which are well-established industries, development involving hydraulic fracturing for shale gas, or development for some other forms of unconventional gas, would involve new and relatively unfamiliar processes in the Plan area and in the UK generally. As a result there is no well-established track record of the successful progression of development from the operational stage through to the final decommissioning and restoration of the site. The national Planning Practice Guidance states that a financial guarantee provided by the operator to cover restoration and aftercare costs can be justified where a novel approach or technique is to be used.
- 5.165 At the time of preparing this Joint Plan, unconventional hydrocarbon development, particularly for shale gas and other technologies such as Underground Coal Gasification, is unproven on a commercial scale in the UK. The relevant mineral planning authority may therefore, depending on the scale and nature of the development proposed and sensitivity of the location, require provision of an adequate financial guarantee. This is to ensure that there is appropriate financial provision in place, at the outset, to safeguard the satisfactory restoration and aftercare of the land in accordance with planning requirements. Whether this policy should be continued throughout the plan period will be considered at the first review of the Joint Plan.
- 5.166 In applying policy the Authorities will have regard to other regulatory regimes and will work effectively with other regulatory bodies as explained in paragraph 5.157.

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;**
- ii) The proposals would not have an unacceptable impact on the quality and availability of ground and surface water resources, on land stability, or on public health and safety;**

<p>iii) There would be no unacceptable impact on the environment or local communities; and iv) The proposals are consistent with other relevant policies in the Plan.</p>	
<p>Transport of carbon or gas should be via pipeline with the routing of lines selected to give rise to the least environmental or amenity impact.</p>	
<p>Main responsibility for implementation of policy: NYCC , CYC, NYMNPA and Minerals industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p><i>D01, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11, D12</i></p>	<p><i>Objectives 9, 10, 11, 12</i></p>
<p>Monitoring: Monitoring indicator 19 (see Appendix 3)</p>	

Policy Justification

5.167 Carbon Capture and Storage is a technique which can be used to reduce 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 it, 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 have been under consideration (via the National Significant Infrastructure Planning procedures) for the capture and storage of carbon from Drax power station, in North Yorkshire, although the cancellation of the project was recently announced. Whilst the proposals would have involved construction of a carbon transport pipeline across part of the Plan area, carbon storage would have taken place within depleted gas fields under the North Sea. In the current circumstances, 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 suggest that it is feasible.

Coal

5.168 Until 2004, substantial tonnages of coal were worked within the Selby Coalfield in North Yorkshire. The Selby Coalfield closed in 2004 leaving Kellingley Colliery as the only operational deep mine in the Plan area. Kellingley Colliery subsequently closed at the end of 2015. The entrance to the mine has been capped and the land associated with the Colliery is being put forward for redevelopment, reducing the possibility of the mine being reopened in the future. Whilst national energy policy seeks to encourage greater use of lower carbon sources of energy, it indicates that coal is likely to be needed in the future, although this is expected to be supplied mainly by imports.

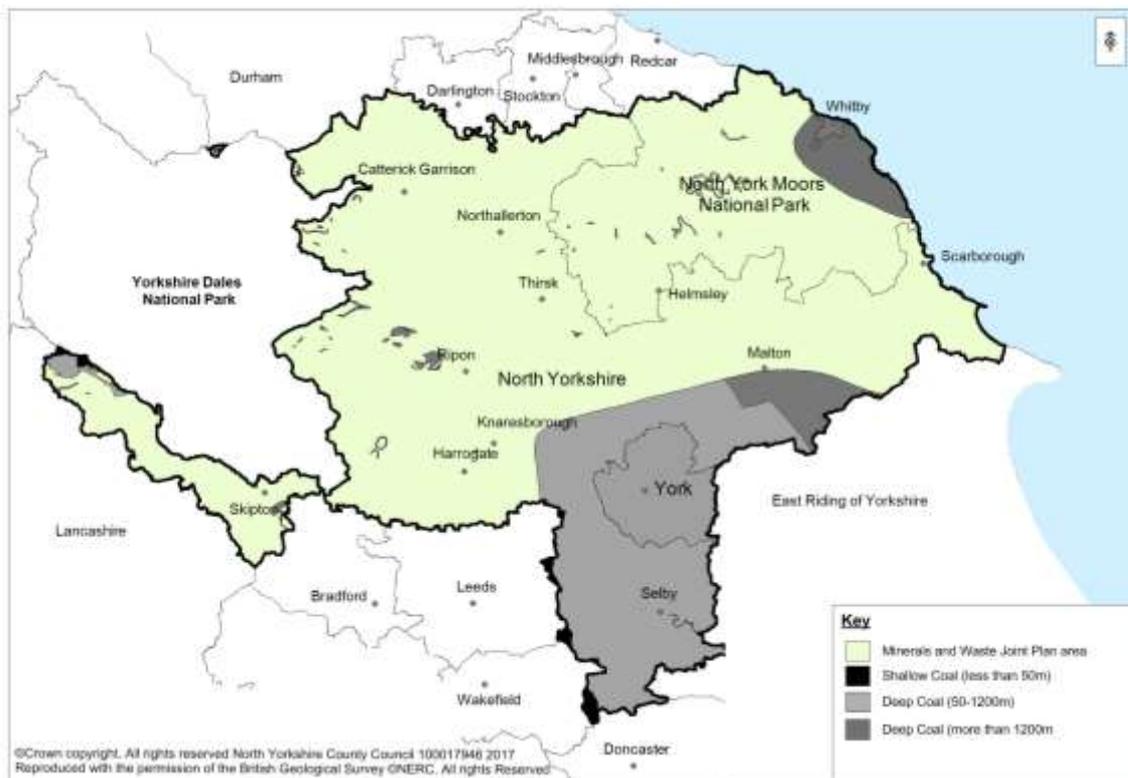


Figure 16: Coal resources in the Plan area

- 5.169 The closure of Kellingley Colliery means that there is presently no coal being mined in the Plan area and there are no known proposals for new operations in the Plan period. However, there is a large area of coal resource still present and national policy identifies coal as a mineral of local and national importance which should be addressed in minerals local plans. It is therefore appropriate to include a policy for coal, including policy relating to disposal of colliery spoil, in the Joint Plan in case future proposals for coal mining come forward.
- 5.170 Minerals resource information shows that there are limited and relatively fragmented resources of shallow coal in some parts of the Plan area, but there has been no recent history of these being worked by opencast methods, nor is there any known commercial interest in doing so currently.

Policy M20: Deep coal and disposal of colliery spoil

- 1) **Proposals for surface and underground development for the mining of deep coal will be permitted where all the following criteria are met:**
 - i) **the location, siting and design of the surface development would ensure a high standard of protection for the environment and local communities in line with the development management policies in the Joint Plan;**
 - ii) **the proposals would enable coal to be transported in a sustainable manner;**
 - iii) **where located in the Green Belt, the proposals would comply with national policy on Green Belt;**
 - iv) **the effects of subsidence upon land stability and important surface structures, infrastructure (including flood defences) and the natural and historic environment, will be monitored and controlled so as to prevent unacceptable impacts;**
 - v) **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**

<p>necessary disposal of mining waste materials arising from the development are acceptable in line with Part 3 below;</p> <p>vi) the proposal's impact upon climate change has been considered.</p> <p>2) Proposals to remediate and restore the Womersley Spoil Disposal Site will be permitted where they would be consistent with the development management policies in the Joint Plan.</p> <p>3) Proposals for new spoil disposal facilities will be assessed by reference to the following order of preference:</p> <p>i) Infilling of quarry voids where this can deliver an enhanced overall standard of quarry reclamation;</p> <p>ii) Use of derelict or degraded land;</p> <p>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).</p> <p>Preference will also be given to proposals for new spoil disposal facilities which are located:</p> <p>iv) Outside the Green Belt, unless it can be shown that the proposals can be accommodated within the Green Belt in line with national policy;</p> <p>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 local communities.</p> <p>vi) the proposals impact upon climate change has been considered.</p>	
<p>Main responsibility for implementation of policy: NYCC, CYC and NYMNPA, Minerals Industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p><i>M11, M16, M21, W01, W05, W10, I01, I02, D02, D03, D04, D05, D06, D07, D08, D09 D10, D11, D12, D13</i></p>	<p><i>Objectives 2, 4, 5, 6, 8</i></p>
<p>Monitoring: Monitoring indicator 20 (see Appendix 3)</p>	

Policy Justification

- 5.171 Kellingley Colliery closed at the end of 2015 and is unlikely to reopen in the future. The mine entrance has been capped and the former mine operator is proposing to put the land forward for redevelopment. However, there is still a large resource of deep coal in the Plan area and therefore the potential for proposals for future extraction of deep coal, although this is unlikely in the current Plan period. However, to ensure appropriate policy coverage in the Joint Plan, Policy M20 sets out the main strategic criteria that would apply to any such proposals that may come forward.
- 5.172 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 require remediation for any damage caused, there is public interest in the planning system ensuring a degree of protection. Features at risk can include infrastructure such as roads and railway lines and flood defence works, sensitive environmental and cultural designations, and listed buildings. Any proposals will need to ensure that unacceptable impacts from subsidence will not arise.
- 5.173 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 since the closure of Kellingley Colliery is

being restored. A proposal has been submitted to extend the time allowed for the restoration of Womersley spoil disposal facility by two years, using the remaining colliery spoil from Kellingley Colliery and soil making materials from elsewhere. Transport and disposal of spoil can have significant impacts on communities and on the environment, especially when road haulage is involved. It is therefore important, when new disposal sites are under consideration, to give preference to proposals which use sustainable transport modes such as rail, water or pipeline. Where road haulage is the only practicable option it will be need to be demonstrated that suitable haulage routes are available between the location of the arisings and the point of disposal.

5.174 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.

Policy M21: Shallow coal	
<p>1) Proposals for the extraction of shallow coal will be permitted where extraction would take place as part of an agreed programme of development, in order 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 Joint Plan.</p> <p>2) Other proposals for the working of shallow coal will be permitted where the following criteria are met:</p> <ul style="list-style-type: none"> i) Where located in the National Park or an AONB the development would be consistent with Policy D04 or, where the development would be located outside a National Park or AONB, would provide a high standard of protection to the designated area; ii) A high standard of protection would be provided to internationally and nationally important nature conservation designations; 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. 	
Main responsibility for implementation of policy: NYCC, CYC and NYMNPA, Minerals Industry	
Key links to other relevant policies and objectives	
<i>M20, M22, S01, S06, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11, D12</i>	<i>Objectives 5, 9</i>
Monitoring: Monitoring indicator 21 (see Appendix 3)	

Policy Justification

5.175 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, national or international nature conservation designations or Green Belt. In a number of instances the resource is also found in locations relatively remote from major transport routes.

- 5.176 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 local community should any proposals come forward, in addition to those requirements set out in the general development management policies elsewhere in the Joint Plan.
- 5.177 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 the environment and local communities and would not prejudice delivery of the surface development giving rise to the opportunity for prior extraction. Where such prior extraction is proposed, compliance with relevant environmental and amenity policies in the Joint Plan will be required.

Potash and salt

- 5.178 Potash is the generic term for potassium bearing minerals and has an important economic value for fertiliser. Within the Plan area it takes the form of sylvinites, which can be processed to create 'muriate of potash', and polyhalite, which although lower in terms of potassium content, also includes other important plant nutrients, particularly sulphur. 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 M22: Potash, polyhalite and salt supply

Proposals for the extraction of potash and salt at sites within the North York Moors National Park and renewed applications for the existing sites at Boulby Mine and Woodsmith Mine beyond their current planning permissions will be assessed against the criteria for major development set out in Policy D04.

Proposals for new surface development and infrastructure associated with the existing permitted potash and salt mine sites in the National Park, or their surface expansion, which are not considered to be major development, will be permitted provided they meet the requirements of Policy D11 and Policy I02 and that no unacceptable impact would be caused to the special qualities of the National Park, its environment or residential or visitor amenity in the context of any need for the development. Proposals for new surface development and infrastructure which are considered to represent major development will be assessed against the criteria for major development set out in Policy D04.

Proposals for increased volume of potash extraction, the extraction of other forms of potash not included in existing permissions, or sub-surface lateral extensions to the permitted working area in locations accessible from the existing sites at Boulby Potash Mine and the Woodsmith Mine site as well as proposals for new sites outside of the National Park, will be permitted where it can be demonstrated that the following criteria are met:

- i) The proposals would not result in unacceptable harm to the special qualities of the National Park, taking account of any mitigation measures proposed;**

<p>ii) The effects of subsidence upon land stability, coastal erosion and important surface structures, infrastructure (including flood defences) and environmental and cultural designations, can be monitored and controlled so as to prevent unacceptable impacts;</p> <p>iii) The proposed arrangements for disposing of mining waste materials arising from the development are acceptable; and</p> <p>iv) The requirements of Policy I01 for transport and infrastructure have been fully considered.</p>	
<p>Main responsibility for implementation of policy: NYCC, NYMNPA and Minerals industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p>I01, I02, S01, S04, D01, D02, D03, D04, D05, D06, D08, D09, D07 D10, D11, D12</p>	<p>Objectives 3, 5, 6, 8, 10</p>
<p>Monitoring: Monitoring indicator 22 (see Appendix 3)</p>	

Policy Justification

- 5.179 In planning terms, the differentiation between the two forms of potash is important, in relation to the policy requirements of the major development test relating to need assessment. There has been an existing national requirement for the sylvinitic form of potash, whereas polyhalite is new to the global fertiliser market and is not yet well established product. The planning permission for Boulby Mine allows for the extraction of 'potash', covering both sylvinitic and polyhalite (and also rock salt), whereas the 2015 permission for Sirius Minerals at Doves Nest Farm is restricted to polyhalite only. Another important distinction is the fact that sylvinitic requires processing and therefore has significant additional infrastructure requirements, whereas when polyhalite is mined the entire ore is used with only the need for granulation. In Policy M22, the term 'potash' means all forms of the mineral unless where otherwise explicitly stated.
- 5.180 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, although the mine now produces mainly polyhalite, with mining currently occurring at depths of 800-1350m below ground with operations extending to 14km off-shore. In 2015, permission was granted for a second mine, located at Doves Nest Farm near Whitby, for the extraction of polyhalite underneath the North York Moors National Park, incorporating a 37km tunnel to convey the mineral to a handling facility at Wilton on Teesside. An associated export facility at Teesport was approved in 2016 under the NSIP process. The "North Yorkshire Polyhalite Project" (now known as Woodsmith Mine) was approved by the North York Moors National Park Authority when it concluded that the potential economic benefits from the proposal represented a transformational economic opportunity at a regional and local level. At the same time it was concluded that the innovative nature of the mine design and associated landscaping would result in an acceptable reduction in the long term environmental impacts of the development. It was also recognised that there was no realistic scope for locating the development elsewhere outside the National Park. (It is important to note that the need for the mineral was not considered to represent exceptional circumstances as this form of potash did not have any established market globally, and in any case was available in significant volumes at the nearby Boulby Potash mine). Construction of the mine began formally on the 4th May 2017. At the time of commencement of the MWJP Hearings, site preparation works at both the mine site and the Lockwood Beck intermediate tunnel site (located just outside the National Park in the Redcar & Cleveland BC area) were substantially complete

and construction of the project is continuing, with first Polyhalite production currently expected to commence in the first few years following adoption of the MWJP.

- 5.181 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.

Gypsum

- 5.182 Gypsum is a product of the evaporation of seawater and is used mainly in the manufacturing of plaster, plasterboard and cement. Although specific evidence is not available, it is possible that demand for gypsum will increase in line with future development and economic growth.
- 5.183 Gypsum is found close to the surface and has been mined in the Plan area although it is not currently worked, with a former mine at Sherburn in Elmet closing in 1988. The mine workings are now understood to be flooded.
- 5.184 Synthetic gypsum is produced at Drax and Eggborough power stations as a by-product of the process of flue gas desulphurisation following the burning of coal. Moves towards greater use of lower carbon fuel for power generation may lead to reduction in output of synthetic gypsum in the longer term.
- 5.185 Gypsum is identified as a mineral of local and national importance in the NPPF, which requires policies to be included for its extraction.

Policy M23: Supply of gypsum

The extraction of natural gypsum and the supply of desulphogypsum will be permitted where the following criteria are met:

- i) the location, siting and design of surface development would ensure a high standard of protection to the environment and local communities in line with the development management policies in the Joint Plan and the site would not be located in the Green Belt unless it can be shown that the development can be accommodated within the Green Belt in line with national policy;**
- ii) the effects of any subsidence upon land stability and important surface structures, infrastructure (including flood defences) and the natural and historic environment, will be monitored and controlled so as to prevent unacceptable impacts.**

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

Key links to other relevant policies and objectives

I01, I02, D01, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11, D12

Objective 5

Monitoring: Monitoring indicator 23 (see Appendix 3)

Policy Justification

- 5.186 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 potential gypsum and anhydrite bearing units occur at depth under the Plan area but 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 Joint Plan, would be consistent with national policy objectives, including the presumption in favour of sustainable development.

- 5.187 The supply of synthetic gypsum (known as desulphogypsum) is consistent with objectives to preserve scarce natural resources and to minimise waste. Where development associated with the supply of synthetic gypsum falls within the scope of the Joint Plan, it is considered that support should be provided, subject to compliance with other relevant policies. The amount of synthetic gypsum produced is likely to reduce over time due to the move from coal to other forms of fuel at Drax Power Station and the potential closure of Eggborough Power Station in the future. It is therefore not considered appropriate to give specific priority, in the policy, to supply of synthetic gypsum over natural gypsum as this may limit potential to maintain overall supply of gypsum in the future.

Vein Minerals

- 5.188 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.
- 5.189 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 M24: 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 Joint Plan, having particular regard where relevant to any impacts on:

- i) important habitats and species;
- ii) protected landscapes;
- iii) heritage assets;
- iv) tourism assets;
- v) transport infrastructure.

Main responsibility for implementation of policy: NYCC and Minerals industry

Key links to other relevant policies and objectives

101, 102, D01, D02, D04, D05, D06, D07, D08, D09, D11, D12 | Objectives 5, 9

Monitoring: Monitoring indicator 24 (see Appendix 3)

Policy Justification

- 5.190 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.
- 5.191 A small amount of fluorspar, barytes and lead mineralisation occurs alongside 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.
- 5.192 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 small scale fluorspar extraction.
- 5.193 There is no evidence of any commercial interest in reactivating workings or opening new workings in the Joint Plan area, or any indication of any future requirements.
- 5.194 The significant environmental constraints in areas with potential deposits of vein minerals, such as the western part of Harrogate Borough, together with the absence of any apparent commercial interest in these deposits in the Joint Plan area means that it would not be appropriate to express specific support in the Joint Plan for the principle of further working. 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, depending on the location of any proposals which do come forward.

Borrow Pits

- 5.195 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 be a sustainable form of development by reducing transportation impacts compared with supply from other sources. They can also help to prevent sterilisation of the resource, ensure higher quality materials are not used for a lower grade use and also reduce the need for new or expanded conventional quarries.

Policy M25: Borrow pits

Proposals for borrow pits, where permission is required, will be permitted where the required mineral cannot practicably be supplied by secondary or recycled material of appropriate specification from a source in close proximity to the construction project, and; where all the following criteria are 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 restored to a high standard within an agreed timescale and to an agreed end-use without the use of imported material other than that generated on the adjoining construction project.**

Main responsibility for implementation of policy: NYCC, NYMNPA, CYC and Minerals industry	
Key links to other relevant policies and objectives	
<i>D01, D02, D03, D04, D05, D06, D07, D09, D10, D11, D12</i>	<i>Objectives 5, 7</i>
Monitoring: Monitoring indicator 25 (see Appendix 3)	

Policy Justification

- 5.196 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.
- 5.197 The Town and Country Planning (General Permitted Development) (England) Order 2015 sets out where development is permitted without needing to make 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 outside the land from which it was extracted and therefore, in these circumstances, proposals will be considered against the criteria set out in Policy M25.

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 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 construction and demolition activity and waste arising from municipal sources, known as Local Authority Collected Waste (LACW) are, by volume, the most common forms of waste arising in the Plan area¹⁹.
- 6.2 LACW arises widely across the 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 Plan area being key sources of arisings. It can comprise a wide range of items including inert waste and biodegradable 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 reasonable 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 need management at off-site facilities.
- 6.5 The large majority of agricultural waste comprises organic materials, although other items such as plastic packaging may arise. It is generated widely outside urban locations but is particularly associated with more intensively farmed areas outside the upland parts of the Plan area.

¹⁹ 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 dispose of 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.

- 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 (LLR waste) from the non-nuclear industry currently 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. There is potential for an increase in arisings of waste water and LLR waste if shale gas development activity becomes established in the area.
- 6.7 The following table presents estimates of arisings of the main waste streams in the North Yorkshire sub-region for 2014 unless otherwise stated.

North Yorkshire Sub region Arisings 2014 (tonnes)	Estimated Main Waste	Comment
Local Authority Collected Waste	425,864	Does not include arisings within the Redcar and Cleveland area of the NYMNP.
Commercial and Industrial waste	322,872	Excludes large volumes of power station ash from Drax and Eggborough Power Stations deposited at private disposal facilities at Barlow and Gale Common ash disposal sites.
Construction, Demolition and Excavation waste	820,705	Excludes waste managed at EA Registered Exemption sites.
Hazardous Waste	33,143	
Agricultural waste	33,786	Excludes large volumes of organic farm waste managed directly within the farm holding.
Low-Level Radioactive waste	Estimated at less than 50m ³	EA Estimate
Waste water	No data available	

Table 4: Estimated waste arisings in the North Yorkshire sub-region²⁰

- 6.8 Alongside these estimates of waste arisings, information published by the Environment Agency (EA) suggests that a total of around 2.7 million tonnes (mt)²¹ of waste was deposited at EA permitted waste management facilities²² in the NY sub-region in 2014. There are also a range of import and export movements across the sub-regional boundary, mainly to and from West Yorkshire, the North East and the Hull and Humber area. Data on cross-boundary movements suggests that volumes of imports and exports are relatively small in comparison to total deposits and estimated arisings²³. There is variability in volumes of cross-boundary movements depending on commercial and other factors and such variability is likely to continue in the future.

²⁰ North Yorkshire sub region Waste Arisings and Capacity Requirements Update Report September 2016 (Urban Vision) - Capacity information subsequently updated March 2017 in accordance with 2015 Environment Agency Waste Data Interrogator

²¹ 2014 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 latter waste is expected to be waste ash from power stations.

²² There are a substantial number of permit exempt sites in the area but specific information on waste deposited at these is not available.

²³ E.g. North Yorkshire sub region Waste Arisings and Capacity Requirements Update Report September 2016 (Urban Vision)

- 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. 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 around 46%²⁴, with local and national targets to achieve a level of 50% by 2020.
- 6.10 There is a need for the Joint 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 Strategy²⁵. 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 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 is now well advanced, with the facility expected to be fully operational in early 2018. When operational the facility will enable the landfill diversion and recycling targets to be exceeded.
- 6.11 There are also a range of other national objectives supporting the more sustainable management of waste and recently the EU has identified a target for 65% recycling of waste (excluding CD&E waste and waste water), with a maximum of 10% to landfill, as part of a move towards a 'circular economy'. In this and the comparable objective of a 'zero waste economy' as expressed by the UK Government, 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 also 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 £2.65 per tonne. The standard rate is currently (2016/17) £84.40 per tonne and is expected to increase further in line with inflation. 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 and composting facilities, landfill sites, treatment facilities and transfer stations and more facilities are either under construction or have received planning permission. Most of these existing or permitted facilities 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 waste generated in the Park (and also in the Yorkshire Dales National Park) is managed in the NYCC area.

²⁴ 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

²⁵ The Joint Municipal Waste Management Strategy was produced by the York and North Yorkshire Waste Management Partnership in 2006 and sets out a range of local targets and objectives for managing this waste stream

- 6.14 To help with planning for waste in North Yorkshire the 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 31 December 2030. The findings of this sub-regional study²⁶ 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 current waste management capacity, in order to identify any important capacity ‘gaps’ for which provision should be made in the Joint Plan. The findings of the project have informed the content of the Joint Plan.
- 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 the environment and local communities.
- 6.16 Supporting the provision of facilities needed to manage waste more sustainably will also help to meet 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 to ensure that the waste management industry can come forward with proposals which support 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 policy²⁷ and needs to be reflected in the approach taken in local plans for waste. Minimisation of waste, preparing for 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 Joint 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 also play a role in moving waste up the hierarchy such as through encouraging the co-location of complementary waste activities. This is addressed later in Policy W11 dealing with waste site identification principles. In combination, these actions will help to ensure that waste management practice can continue to move further up the

²⁶ North Yorkshire sub region Waste Arisings and Capacity Requirements Update Report September 2016 (Urban Vision)

²⁷ National Planning Policy for Waste (DCLG 2014)

waste hierarchy and decisions by the Waste Planning Authorities in the area will be guided by the principles set out in Policy W01 below.

Policy W01: Moving waste up the waste hierarchy

- 1) **Proposals will be permitted where they would contribute to moving waste up the waste hierarchy through:**
 - i) the minimisation of waste, or;
 - ii) the increased re-use, recycling or composting of waste, or;
 - iii) the provision of waste treatment capacity and small scale proposals for energy recovery (including advanced thermal treatment technologies), which would help to divert waste from landfill.

- 2) **Further capacity for the large scale recovery of energy from waste (in excess of 75,000 tonnes annual throughput capacity), including through advanced thermal treatment technologies, will only be permitted 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 recovery of energy can be achieved.**

- 3) **The provision of new capacity for the landfill of residual non-inert waste will be permitted where it can be demonstrated that it is the only practicable option and sufficient permitted capacity within the Plan area is not available. Proposals for the extension of time at existing permitted landfill sites with remaining void space will be supported in principle, where necessary either:**
 - (i) to maintain capacity for disposal of residual waste, or;
 - (ii) to achieve the satisfactory restoration of the site.

- 4) **Landfill of inert waste will be permitted where it would facilitate:**
 - i) a high standard of quarry reclamation in accordance with agreed reclamation objectives, or;
 - ii) the substantial improvement of derelict or degraded land where it can be demonstrated that the import of the waste is essential to bring the derelict or degraded 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, W10, W11, S03, D01, D10

Objective 1

Monitoring: Monitoring indicator 26 (see Appendix 3)

Policy Justification

6.19 Waste minimisation, preparation for reuse, recycling and composting (where relevant quality protocols are met) are the higher levels of the waste 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, recycling or composting is not practicable. For these, other forms of treatment or recovery 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.

- 6.20 Waste which it is not practicable to deal with through the higher levels of the hierarchy (known as 'residual waste') may also be capable of being used as a resource via the recovery of energy through various forms of thermal treatment processes, including incineration and Advanced Thermal Treatment (ATT) technologies, such as gasification and pyrolysis. Where recovery of energy is proposed, national policy encourages utilisation of heat generated, potentially in association with electrical power, to help to ensure the most efficient use of the waste as a resource. For all proposals for facilities which recover energy from waste consideration should be given to the utilisation of the heat produced as an energy source. However, the investment required to undertake this 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 threshold of 75,000tpa is consistent with the threshold used to define larger scale facilities within the Yorkshire and Humber Waste Position Statement (February 2016), produced jointly by all Waste Planning Authorities in the Yorkshire and Humber area. 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 recovery of electrical energy, 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 still to 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. Achieving a high standard of reclamation, potentially including importation of suitable materials, is addressed in Policy D10 'Reclamation and afteruse'. Subject where necessary to extending time for completing landfilling at existing sites with time limited permissions in the area, there should be adequate capacity for landfill of residual biodegradable waste. It therefore follows that, in line with the waste hierarchy, it would not be appropriate to support the development of new biodegradable landfill sites in the Plan area unless there is a clear justification in terms of any unmet needs.
- 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 gases to the same extent as biodegradable waste. It can also play an important role in improving the standard of reclamation of quarries in the Plan area and, in some cases, improving derelict or degraded land. It is therefore appropriate in some circumstances to provide policy support for this method of waste management.

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 YDNP²⁸ and most of this waste is currently dealt with in the NYCC area. It is expected that this arrangement will need to continue over the Plan period and is reflected in future waste management capacity requirements for the Plan area identified through the waste arisings and capacity evidence project undertaken on behalf of 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). Memoranda of understanding with the YDNPA and Redcar and Cleveland Borough Council have been agreed to reflect this.

- 6.25 A view also needs to be taken on the extent to which the Joint 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. The evidence shows that the area already has a relatively high degree of self-sufficiency in capacity for some wastes. However, there have been a number of known exports movements in recent years. This includes landfill and some treatment of hazardous waste, management of some LLR waste, and; other specialist needs, including some treatment and final reprocessing capacity for recycled C&I and LACW²⁹.
- 6.26 Environment Agency data indicates that in 2014 the North Yorkshire sub-region imported a minimum of 212,000 tonnes of waste (251,000 tonnes in 2012 and 193,000 tonnes in 2013). However, the actual figure is likely to be higher due to the lack of detail on the origin of some waste arisings. In each year, from 2012 -2014, the sub-region is known to have exported over 300,000 tonnes of waste. The majority of import and export movements were from or to other locations in Yorkshire and Humber or the North East. However, as indicated above, data suggests that there are significant annual variations in the scale of movements between particular areas and this limits the potential to establish a comprehensive understanding of current and likely future waste flows.
- 6.27 Examples of specific waste streams which have been exported for management 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 appliances. As noted in the Yorkshire and Humber Waste Position Statement 2016, final reprocessing capacity for many wastes is subject of regional or national scale markets, with the Yorkshire and Humber area containing the largest concentration of glass and metal reprocessors in England.
- 6.28 This information suggests that the waste management market is relatively complex. Such complexity is likely to continue to exist over the Plan period, including in response to commercial factors and the decisions of waste producers.
- 6.29 Approximately 86% of hazardous waste arising within the Plan area in 2014³⁰ was ultimately managed outside the area, with West Yorkshire and the Tees Valley being the main export destinations. This indicates that the area is particularly reliant on capacity elsewhere for management of this relatively specialised but diverse form of waste, which arises in small quantities and for which specialist management provision is required. Economies of scale suggest it is unlikely to be practicable to provide dedicated capacity for this waste in the Plan area.

²⁸ i.e. the area excluding that part of the YDNP located within Cumbria

²⁹ 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 and other recycling facilities. However, it is likely that a substantial amount of final reprocessing of recycled materials takes place outside the Plan area.

³⁰ Environment Agency Hazardous Waste Interrogator 2014

6.30 Government policy encourages communities to take responsibility for their waste arisings and sets out a requirement to ensure that waste can be disposed of or, in the case of mixed municipal waste collected from private households, recovered at the nearest appropriate installation. Reducing the need for transport of waste over long distances can often be the most sustainable arrangement, for example in terms of reducing the environmental or local amenity impacts of 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 to use existing infrastructure effectively. Nevertheless, increasing the capability of the area to manage the waste that arises within it is an important sustainability consideration that should be addressed in the Joint Plan. As a result, the approach in the Joint Plan is to seek a move towards a position of ‘net self-sufficiency’, as explained in more detail in the justification for Policy W02 below.

Policy W02: Strategic role of the Plan area in the management of waste	
<ol style="list-style-type: none"> 1) Support will be given through the allocation of sites and the grant of planning permission for the additional waste management capacity needed to help achieve net self-sufficiency in capacity at a level equivalent to expected arisings in the Plan area, by 31 December 2030. 2) 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 within the National Park. 3) Except as provided for in 2) above, where a facility is proposed specifically to manage waste arising outside the Plan area, including specialist facilities such as those accommodating hazardous waste, will not be permitted unless it can be demonstrated that the facility would represent the nearest appropriate installation for the waste to be managed. 4) Proposals which would help meet unforeseen needs for the management of specific waste streams arising in the Plan area but not specifically identified or provided for in the Joint Plan, will be permitted where they would be in line with the requirements of Policies W10 and W11. 	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry	
Key links to other relevant policies and objectives	
<i>W01, W03, W04, W05, W06, W07, W08, W09, W10, W11, D01</i>	<i>Objectives 2, 4, 6, 7</i>
Monitoring: Monitoring indicator 27 (see Appendix 3)	

Policy Justification

6.31 National policy 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 Joint 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 Waste Planning Authorities.

- 6.32 Planning for a 'net self-sufficiency' approach can help ensure that a suitable level of provision is made, where practicable, by planning for waste management capacity at a level equivalent to expected future arisings in the area. This ought to ensure that additional capacity can be delivered within the Plan area over the period to 31 December 2030 to achieve the local management of waste, whilst acknowledging that a degree of import and export movements are likely to continue, although it is recognised that levels of waste imports and exports may not always balance.
- 6.33 Such an approach also reflects the fact that, for certain specialist waste streams, including hazardous waste for landfill and LLR waste requiring management at specialist waste water treatment facilities or other specialist facilities, wider geographical markets for waste management exist. Similar considerations apply to final 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. However, if arisings of specialist waste streams were to increase significantly, for example as a result of new industrial or commercial activity taking place in the Plan area, this may justify the provision of facilities in the Plan area and proposals for these would be addressed through the requirements of Policies W10 and W11 and other relevant policies in the Joint Plan as appropriate.
- 6.34 As part of the evidence base for the Joint 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 in those which have recently exported significant amounts of waste to the area, has been undertaken. This suggests that these areas are, or are intending to, plan on the basis of net self-sufficiency (or equivalent) for their area. This in turn suggests 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 over the foreseeable future if necessary. Together, these factors indicate that an approach of planning for net self-sufficiency for the Plan area is likely to be adequate and appropriate in meeting future waste management needs.
- 6.35 The Waste Arisings and Capacity study undertaken as part of the evidence base for the Joint Plan was prepared in partnership with the YDNPA and reflected capacity requirements for waste arising in the YDNPA within the study. These are in turn reflected in the future capacity requirements identified 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 this is being addressed in the new Local Plan for the YDNP. A memorandum of understanding between the Authorities and the YDNPA reflects this agreed position.

Meeting future waste management needs

- 6.36 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; likely future waste management practice, and; the waste management capacity expected to be available over the Plan period. As mentioned earlier, work on this has been carried out to support preparation of the Joint Plan. This work provides an important benchmark but the position with regard to predicting 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 the 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 periods, for example as new permissions are granted or expire.

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

6.38 The work commissioned by the Authorities uses two scenarios, one about possible changes in the 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 operational 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. The table below provides the projected arisings of waste within the North Yorkshire sub-region at key years throughout the Plan period.

Waste Type	Quantity 2016 (tonnes)	Quantity 2020 (tonnes)	Quantity 2025 (tonnes)	Quantity 2030 (tonnes)
LACW ³¹	442,297	452,949	468,706	483,416
AWRP Estimated Outputs - C&I	-	67,346	70,233	72,977
AWRP Estimated Outputs - Hazardous	-	16,035	16,723	17,377
C&I	327,252	336,200	347,759	359,736
CD&E	837,201	871,196	897,639	920,306
Hazardous	33,542	34,353	35,395	36,467
Agricultural	33,786	33,786	33,786	33,786
LLR waste	<50m ³	<50m ³	<50m ³	<50m ³
Waste Water	No data available	No data available	No data available	No data available
TOTAL (excluding LLR waste and waste water)	1,674,078	1,811,865	1,870,241	1,924,065

Table 5: Projected waste arisings in the North Yorkshire sub-region 2016, 2020, 2025 and 2030³²

6.39 The projected waste arisings included in Table 5 are based on the assumption that LACW grows in line with projections used by the York and North Yorkshire Waste Partnership. Arrangements are in place through the Partnership to manage this projected increase over the Plan period, including through use of the Allerton Waste Recovery Park facility (AWRP). The proposed AWRP facility has been designed to accommodate expected growth in arisings of residual LACW over the period to 2040 and is also expected to be able to provide some capacity for C&I waste over the plan

³¹ LACW projections are for 2016/17, 2020/21, 2025/26 and 2030/31 respectively.

³² North Yorkshire Sub Region Waste Arisings and Capacity Requirements Update Report September 2016 (Urban Vision) – Capacity information subsequently updated March 2017 in accordance with 2015 Environment Agency Waste Interrogator.

period. When operational, the AWRP facility will enable targets agreed under the current Municipal Waste Management Strategy for York and North Yorkshire to be met.

- 6.40 Projections for other relevant waste streams are based on the ‘growth’ scenario modelled in the Waste Arisings and Capacity report. This represents the highest assumed growth rate of the various scenarios considered in the report, in order to help ensure that adequate capacity is planned for. Further information on the growth scenarios considered are included in the North Yorkshire sub-region Waste Arisings and Capacity Requirements Update Report (September 2016), contained in the evidence base for the Plan.
- 6.41 In order to help identify any potential future ‘capacity gaps’, it is also necessary to consider the amount of operational capacity that is currently available within the Plan area, in line with the National Planning Policy for Waste (2014), and how this is expected to change over time as a result of the expected expiry of existing planning permissions. This is shown in Table 6 below. For 2020 onwards the Table also includes capacity within the AWRP facility³³. Although this is not yet operational the facility is at an advanced stage of construction and is expected to be fully commissioned in early 2018. There is therefore a very high degree of confidence that this capacity will come on stream.

Waste Management Method	Capacity 2016 (tonnes)	Capacity 2020 (tonnes)	Capacity 2025 (tonnes)	Capacity 2030 (tonnes)
Recycling (C&I, LACW, Agricultural)	734,450	979,751	945,230	895,230
Recycling (CD&E)	315,920	240,920	177,482	177,482
Recycling (Specialist Material)	106,200	106,200	106,200	106,200
Treatment Plant	272,935	381,949	374,925	374,925
Composting	163,171	163,171	148,171	134,835
Energy from Waste	0	320,000	320,000	320,000
Landfill (C&I, LACW, Agricultural)	525,927	148,563	56,816	0
Landfill (CD&E)	658,444	300,406	131,340	131,340
Landfill (Haz)	610	0	0	0
TOTAL	2,777,657	2,640,960	2,260,164	2,140,012

Table 6: Total actual (2016) and projected (2020, 2025 and 2030) operating waste management capacity in the North Yorkshire sub-region (tonnes per annum)³⁴

³³ The AWRP facility will include a range of processes including mechanical treatment, anaerobic digestion, energy from waste recovery and incinerator bottom ash recycling

³⁴ North Yorkshire sub region Waste Arisings and Capacity Requirements Update Report September 2016 (Urban Vision) - Capacity information subsequently updated March 2017 in accordance with 2015 Environment Agency Waste Data Interrogator

6.42 Since work on arisings and capacity evidence was first commissioned by the Authorities, potential scenarios for waste management practice have been reviewed in the updated Waste Arisings and Capacity Requirements study (2016). This is to ensure that the modelling work takes into account more up-to-date information and targets and responses received on the original scenarios during consultation at earlier stages of Plan preparation. This has resulted in use of the following summarised assumptions about waste management practice in the Joint Plan³⁵.

Waste Stream	Practice assumption		Comment
LACW	Waste is managed in accordance with existing and planned arrangements and in accordance with agreed targets in the JMWMS and delivery of AWRP facility.		Reflects current approach by the York and North Yorkshire Waste Partnership and implementation of the AWRP facility.
C&I waste	Commercial waste	Industrial waste	These assumptions reflect the 'alternative median' scenario modelled in the Waste Arisings and Capacity Update Report (2016) and is considered to represent a realistic target in terms of recycling performance, which is in line with the current EU 'circular economy' target, whilst reflecting the existence of significant permitted energy recovery capacity in the Plan area.
	By 2020: 10% to landfill Of the remainder: 60% recycling 40% EfW By 2030: 10% or below to landfill Of the remainder: 65% recycling 35% EfW	By 2020: 18% to landfill Of the remainder: 60% recycling 40% EfW By 2030: 18% or below to landfill Of the remainder: 65% recycling 35% EfW	
CD&E waste	Maximised recycling scenario: By 2020: 75% recycling 20% treatment 5% landfill Alternative median recycling scenario: By 2020: 60% recycling 20% treatment 20% to landfill		These assumptions provide a challenging maximum recycling scenario for CD&E waste, recognising the potential for more sustainable management of this waste stream, whilst also reflecting the need to consider requirements for landfill if high rates of recycling are not achieved.

Table 7: Practice scenarios

6.43 The scenarios referred to above can, when considered in relation to operational waste management capacity, be used to generate an estimate of the scale of any potential waste management 'capacity gaps', and how these may change over the period to 31 December 2030. This in turn can inform the policy approach in the Joint Plan and ensure that appropriate capacity can be provided.

6.44 Table 8 below summarises the potential capacity gaps identified for the key waste management methods, taking into account the scenarios presented in Table 7. For CD&E waste the projected capacity gap for recycling is based on the 'maximised' recycling scenario. For CD&E landfill, the gaps are presented on the basis of the 'alternative median scenario'. This approach helps ensure that a high rate of recycling is supported, whilst reflecting a potential need for additional landfill capacity if a 75% recycling rate is not achieved.

³⁵ More information on scenarios is provided in the North Yorkshire sub-region Waste Arisings and Capacity Update Report (Urban Vision, 2016)

- 6.45 It should also be noted that the capacity gap figures presented in Table 8 are based on an assumption that the major waste streams arising in the area are managed in the Plan area, in accordance with the principle of net self-sufficiency. In practice it is likely that some waste will continue to be exported (and imported) in accordance with current or future market circumstances. Further flexibility to meet unforeseen requirements is also provided through the positive approach to new development which would help move waste up the hierarchy, or meet needs arising in the Plan area, through Policies W01 and W02 and other relevant policies in the Joint Plan.

Waste Management Method	Projected Capacity Gap/Surplus 2016 (tonnes)	Projected Capacity Gap/Surplus 2020 (tonnes)	Projected Capacity Gap/Surplus 2025 (tonnes)	Projected Capacity Gap/Surplus 2030 (tonnes)
Recycling (C&I, LACW, Agricultural)	-318,261	-532,226	-477,369	-414,655
Recycling (CD&E)	-20,088	349,698	422,315	437,450
Treatment Plant	135,378	90,959	111,694	124,908
Composting	-136,992	-136,276	-120,351	-106,058
Energy from Waste	46,386	-102,961	-95,418	-89,631
Incineration (Specialist High Temp)	13,632	13,632	13,632	13,632
Landfill (C&I, LACW, Agricultural)	-308,556	-109,326	-16,097	42,123
Landfill (Hazardous)	7,252 6,642	23,464	24,379	25,266
Landfill (CD&E)	-159,364	-32,021	102,046	107,939

Table 8: Main projected capacity Gaps/Surplus in the North Yorkshire sub-region (tonnes per annum)³⁶. Please note that capacity gaps are positive figures and capacity surplus are negative.

- 6.46 Based on this approach, capacity gaps exist throughout the plan period for recycling, treatment of waste (physical and chemical), incineration of waste (specialist high temperature) and landfill of Hazardous waste. A capacity gap for recycling of CD&E waste is projected over the majority of the Plan period and for landfill of CD&E waste occurs in the second half of the Plan period. There is potential for a small capacity gap for landfill of C&I, LACW and agricultural waste at the end of the plan period. Other waste management methods are projected to be in surplus throughout the Plan period, 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 further opportunities for movement of specific waste streams up the waste hierarchy or an enhanced geographical network of facilities.
- 6.47 The information above, together with other relevant information, has been used to help develop policies to ensure that adequate provision is made for management of the various main waste streams arising in the Plan area. These are presented in the following sections.

³⁶ North Yorkshire sub region Waste Arisings and Capacity Requirements Update Report September 2016 (Urban Vision)) - Capacity information subsequently updated March 2017 in accordance with 2015 Environment Agency Waste Data Interrogator

Local Authority Collected Waste (LACW)

- 6.48 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.
- 6.49 Substantial progress has been made in recent years in achieving the more sustainable management of LACW. When the new AWRP facility is fully operational (expected in early 2018) this will help to deliver a step change in diverting residual LACW from landfill, as well as a further increase in the rate of recycling of this waste stream. A four-year waste treatment framework (2015-2019) is in place with a number of private waste management operators to manage York and North Yorkshire LACW prior to AWRP becoming fully operational. If AWRP were to be delayed or failed to become fully operational, these contracts would be re-tendered before they expire. Any requirements for additional infrastructure in the Plan area arising from such a scenario would, if necessary, be addressed through a review of site allocations in the Joint Plan.
- 6.50 Notwithstanding the expected position when the AWRP facility becomes operational, other new or improved supporting infrastructure may be proposed during the Plan period to 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 supported through:

- 1) Identification of the Allerton Park (WJP08), in Harrogate Borough, and Harewood Whin (WJP11), in the City of York, sites as strategic allocations over the Plan period for the management of LACW. 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 permitted subject, in the case of the Harewood Whin site, to compliance 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 the site locational and identification principles in Policies W10 and W11 will be permitted.**
- 3) Permitting proposals for:**
 - a) increased capacity for the recycling and treatment of LACW where this would reduce reliance on export of waste from the Plan area and the development would be consistent with the site locational and identification principles in Policies W10 and W11;**
 - b) improvements to the Household Waste Recycling Centre network.**
- 4) Provision of capacity for management of LACW is also supported through site allocations for recycling, recovery of energy, transfer and treatment of LACW, as applicable, at:**

<p>North Selby Mine Anaerobic Digestion (WJP02), in the City of York Southmoor Energy Centre (WJP03), in Selby District Land at Halton East, near Skipton (WJP13), in Craven District Land at Seamer Carr, near Scarborough (WJP15), in Scarborough Borough Land at Skibeden, near Skipton (WJP17), in Craven District Land at Tancred, near Scorton (WJP18), in Richmondshire District Land at Fairfield Road, Whitby (WJP19), in the North York Moors National Park Former ARBRE Power Station (WJP25), in Selby District</p> <p>5) Proposals for development at the allocated sites referred to in 1) 2) and 4) above, and as shown on the Policies Map will be required to take account of the key sensitivities and incorporate the necessary mitigation measures that are set out in Appendix 1.</p>	
Main responsibility for implementation of policy: NYCC, CYC, NYMNP and Waste Industry	
Key links to other relevant policies and objectives	
<i>W01, W02, W10, W11, S03, D01, D05</i>	<i>Objectives 1, 2, 6, 7</i>
Monitoring: Monitoring indicator 28 (see Appendix 3)	

Policy Justification

- 6.51 Substantial progress has been made in recent years in reducing the amount of LACW that is landfilled, with a corresponding increase in recycling, composting and other forms of treatment.
- 6.52 LACW is dealt with at a range of existing facilities in the Plan area and substantial capacity for its management is already in place. When fully operational the AWRP facility will provide sufficient capacity for managing residual LACW to enable diversion from landfill of over 95% for this waste stream, and a recycling rate for household waste of over 50%. This will enable national and local targets for recycling and landfill diversion to be met and exceeded. 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 biodegradable landfill in the Plan area, capable of receiving residual LACW and other waste which cannot be diverted from landfill. Although the progress being made in diverting waste from landfill may mean that the landfill capacity within the site is not required to meet needs arising in the Plan area, there is a small potential gap in capacity for landfill at the end of the plan period and it is considered important to support the retention of the facility to cover this eventuality and provide flexibility in the Joint Plan. The Allerton Park complex is therefore 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 as such in the Joint Plan. The landfill operation is the subject of a planning 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.
- 6.53 Similarly the Harewood Whin site, near York, plays an important strategic role in managing LACW via a range of processes and the site also contains the majority of remaining operational biodegradable landfill capacity in the Plan area alongside the Allerton Park site. It is also the subject of temporary permissions which would need extending during the Plan period and it is considered appropriate to identify and protect the existing site area in the Joint Plan as a strategic allocation, with support in principle for continued operations. As this site is located in the general extent of

York's Green Belt, the emerging York Local Plan will continue to designate the land as Green Belt and any further development would need to be consistent with relevant Green Belt policy.

- 6.54 Whilst extensive new infrastructure requirements for managing LACW during the Plan period are not expected (subject to commissioning of the AWRP facility), a requirement for further transfer station capacity to serve Selby District has been identified in order to facilitate movement of waste to the AWRP facility. A site for this at Burn Airfield has been proposed in response to earlier consultation and is allocated in the Joint Plan. It is also considered appropriate to support the principle of developing other capacity and/or improvements to the network of facilities for managing LACW where this could increase the extent to which the area is net 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 Joint Plan, including Policies W10 and W11 which establish locational principles and site identification criteria for waste facilities.
- 6.55 During preparation of the Joint Plan a number of potential allocations were put forward for sites which could 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. A number of these are allocated in the Joint Plan and they have been identified in Policy W03 and Policy W04 dealing with C&I waste.³⁷

Commercial and Industrial (C&I) Waste

- 6.56 There is no predicted overall gap in recycling or energy recovery capacity for C&I waste over the Plan period under any of scenarios considered although, as for LACW, policy support for further infrastructure is appropriate in order to help maximise the potential for net self-sufficiency in capacity and help meet needs for particular waste types not directly identified in the needs assessment. Waste capacity modelling work to support the Plan has indicated a gap in capacity for physical and chemical treatment of some waste, up to an estimated maximum of around 125,000 tonnes per annum by 2030, as well as for smaller amounts of specialist high temperature incineration, which is currently exported from the Plan area for management. This is likely to include C&I waste. There is potential for a small gap in non-hazardous landfill capacity at the end of the Plan period.
- 6.57 Some specialist recycling needs and final reprocessing of some bulk recyclate materials such as paper, card, glass, plastic and metals, originating at recycling facilities in the Plan area, is also likely to be met by capacity at regionally and nationally significant reprocessing facilities outside the Plan area, through economies of scale.
- 6.58 C&I waste (along with other key waste streams such as LACW and CD&E waste) contain an element of hazardous waste, which requires management at specialist facilities. A capacity gap for hazardous landfill of around 25,000 tonnes per annum by 2030 has been identified and there is no dedicated hazardous landfill capacity in the Plan area.
- 6.59 The scale of any further requirements for energy recovery and anaerobic digestion capacity for C&I waste is dependent partly on the commissioning of the AWRP proposal (see LACW section above), which could also provide some capacity for

³⁷ Sites which could play a role in management of both C&I and LACW include WJP02, WJP03, WJP08, WJP11, WJP13, WJP15, WJP16, WJP17, WJP18, WJP19 and WJP25.

energy recovery from C&I waste over the Plan period. Since the grant of permission for the AWRP facility, permission has been granted for other energy recovery capacity in the Plan area (the Southmoor Energy Centre development and a scheme at the former ARBRE power station site, both located in Selby District), although these have not yet been implemented. Permission was also granted in 2014 for a substantial anaerobic digestion facility at the former North Selby Mine site in the City of York, which has been implemented but is not yet operational. If some or all these proposed developments become operational they have the potential to add significantly to the overall scale and range of capacity in the area for the treatment and recovery of energy from C&I waste (and potentially other waste streams).

- 6.60 Monitoring of the development of any operational capacity at one or more of these permitted sites for C&I waste will therefore be needed and any strategically significant implications addressed as part of any subsequent review of the Plan.

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

- 1) Net self-sufficiency in capacity for management of C&I waste will be supported through:**
 - i) Permitting proposals which would deliver increased capacity for the recycling and treatment of C&I waste, particularly where this would reduce reliance on export of waste from the Plan area and the development would be consistent with the site locational and identification principles in Policies W10 and W11;**
 - ii) Permitting proposals for additional transfer station capacity for C&I waste where it can be demonstrated that additional provision would help reduce overall impacts from road transport of waste and the development would be consistent with the site locational and identification principles in Policies W10 and W11;**
 - iii) Providing large scale capacity for recovery of energy and anaerobic digestion for C&I waste through a combination of spare capacity within the Allerton Waste Recovery Park facility and the Southmoor Energy Centre (WJP03), in Selby District, former ARBRE Power Station (WJP25), in Selby District, and North Selby Mine anaerobic digestion (WJP02), in the City of York, sites, which are identified in the Plan as allocated sites for these uses. The development of the WJP02 site will only be permitted where it would be consistent with the principles of including land in the York Green Belt;**
 - iv) Permitting additional energy recovery capacity for 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 and the development would be consistent with the site locational and identification principles in Policies W10 and W11;**
 - v) Subject to energy recovery capacity becoming operational at the allocated sites referred to in part iii) of this Policy, permission will not be granted for further 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 and the development would be consistent with the site locational and identification principles in Policies W10 and W11.**
- 2) Provision of capacity for management of C&I waste is also supported through site allocations for recycling, transfer and treatment of C&I waste at:**

<p>Land at Halton East, near Skipton (WJP13), in Craven District Hillcrest, Harmby (WJP01), in Richmondshire District Land at Tancred, near Scorton (WJP18), in Richmondshire District Land at Skibeden, near Skipton (WJP17)), in Craven District Land at Allerton Park, near Knaresborough (WJP08), in Harrogate Borough Land at Seamer Carr, near Scarborough (WJP15), in Scarborough Borough Land at Common Lane, Burn (WJP16), in Selby District, Land at Pollington (WJP22), in Selby District, Land at Fairfield Road, Whitby (WJP19), in North York Moors National Park Land at Harewood Whin, Rufforth (WJP11), in the City of York</p>	
<p>3) Proposals for development of the allocated sites referred to in 1) and 2) above, and as shown on the Policies Map, will be required to take account of the key sensitivities and incorporate the necessary mitigation measures that are set out in Appendix 1.</p>	
<p>Main responsibility for implementation of policy: NYCC, CYC, NYMNP and Waste Industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p>W01, W02, W03, W10, W11, D01, D05</p>	<p>Objectives 1, 2, 6, 7</p>
<p>Monitoring: Monitoring indicator 29 (see Appendix 3)</p>	

Policy Justification

- 6.61 Substantial capacity for managing 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. Evidence produced during preparation of the Joint Plan suggests that there is no predicted overall gap in annual capacity for recycling, energy recovery or composting of C&I waste. Notwithstanding this position, it is known that in recent years some C&I waste has been exported from the Plan area for management, including for treatment and more specialised recycling. Providing support for additional capacity in the Plan area could therefore reduce reliance on exports and maximise the potential for the area to be net self-sufficient in capacity for this waste stream. This is reflected in the positive and flexible approach to permitting further capacity for management of C&I waste, as set out in Parts 1) i-iv) of the Policy. Proposals coming forward under these criteria will also be expected to demonstrate compliance with Policy W10 addressing Overall locational principles for provision of waste management capacity and Policy W11 dealing with Waste site identification principles.
- 6.62 The area is likely to remain reliant on export of hazardous C&I waste requiring landfill and for the treatment of some hazardous waste, for which it is unlikely to be practicable to provide specific management facilities in the Plan area, as a result of economies of scale or other factors. Liaison with waste planning authorities which have recently received exports from the Plan area suggest that the potential exists for such exports to continue if necessary. Although there is adequate overall transfer capacity for C&I waste operating in the Plan area, the provision of additional infrastructure could assist with enhancing the geographical network of facilities, thereby 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.
- 6.63 Whilst the main focus of the AWRP facility is on the management of LACW, it is also expected that it could be able to provide some capacity for recovery of C&I waste over the Plan period. However, planning permission has been granted recently for substantial additional energy recovery capacity at the Southmoor Energy Centre and former ARBRE Power Station sites (both in Selby district). These permissions have

not yet been implemented but the potential capacity at these sites could be significant in meeting unforeseen needs for recovery of C&I waste arising in the area, providing flexibility in the Plan. In view of the strategic significance of the capacity they could provide, these sites are allocated in the Plan and they are also safeguarded under Policy S04. A planning permission also exists for a substantial anaerobic digestion facility at the former North Selby Mine site in York. This facility would also have the potential to contribute to availability of a range of technologies for recovery of C&I waste arising in the area and this site is also allocated and safeguarded in the Plan. The North Selby Mine site is located within the general extent of York's Green Belt. The emerging York Local Plan will continue to designate this land as Green Belt and therefore any future proposals on this site will need to comply with national and local Green Belt policy.

- 6.64 In circumstances where committed capacity at all the following sites: Allerton Waste Recovery Park facility, Southmoor Energy Centre (WJP03), former ARBRE Power Station (WJP25) and North Selby Mine (WJP02), becomes operational it is not considered appropriate to support the principle of further large-scale recovery capacity in the area where the waste proposed to be managed would arise mainly outside the Plan area, unless it can be demonstrated that the facility would represent the nearest appropriate installation for recovery of the waste, in line with relevant legislation. Any such proposals will also be expected to provide for utilisation of heat in accordance with Policy W01 and be consistent with the requirements of Policies W10 and W11 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 Statement for Yorkshire and Humber³⁸. The following will form part of the annual monitoring associated with this Policy: implementation of committed capacity, capacity requirements and decisions on all C&I planning applications that would provide additional commercial and industrial waste (including hazardous C&I waste) capacity.
- 6.65 A number of proposed allocations for management of C&I waste have been put forward for consideration during preparation of the Joint Plan. In some cases these are considered suitable for allocation to help maximise the potential for net self-sufficiency in capacity and provide a range of opportunities and locations for management of this waste and these 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 any one stream in particular.
- 6.66 It is unlikely that there will be a requirement for significant new capacity to landfill non-hazardous C&I waste over the Plan period, taking into account permitted capacity and expected increases in diversion from landfill, although there is potential for a small capacity gap at the end of the Plan period. However, a large proportion of remaining capacity for landfill of non-inert waste is concentrated in two sites (the Allerton Park and Harewood Whin landfills). Both these sites are subject of time limited planning permissions expiring during the early part of the Plan period. These key sites are allocated in the Plan under Policy W03 and W04, reflecting their potential role for both LACW and C&I waste, to help ensure that their longer term

³⁸ Yorkshire and Humber Waste Position Statement (Feb 2016)

potential is maintained for landfill of residual waste which cannot be dealt with by other means.

- 6.67 There is some uncertainty, given pollution control constraints, about the potential for new landfill sites for biodegradable waste to be developed in the Plan area if necessary. A number of existing sites in the area, with planning permission for biodegradable 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 biodegradable landfill capacity in the area should it be required. Should an unforeseen requirement for landfill of C&I waste arise, which cannot be met through permitted capacity in the Plan area, this may need to be met by export from the area. Evidence suggests there is significant existing permitted capacity for landfill elsewhere within Yorkshire and Humber³⁹.
- 6.68 Landfill of hazardous C&I waste requires specialist facilities which are limited in number nationally and do not exist in the Plan area. The small scale of arisings of hazardous waste in the area expected to require landfill means that it is unlikely that proposals will come forward for specific provision to be made in the area, although the Joint Plan does not preclude such development where appropriate. In recent years hazardous waste for landfill has been exported to a range of destinations, including in the Tees Valley and in West Yorkshire. Contact with relevant waste planning authorities and collaboration through the Yorkshire and Humber Technical Advisory Body suggests that there is significant capacity in these areas⁴⁰. Sites with hazardous landfill capacity within these areas will represent the Nearest Appropriate Installation for the disposal of this waste.
- 6.69 Specific proposals for new capacity for managing C&I waste will also need to demonstrate compliance with other relevant policies in the Joint Plan, including the development management policies in Chapter 9.

Construction, Demolition and Excavation (CD&E) Waste

- 6.70 CD&E waste is generated in large quantities, with estimated 2014 arisings in excess of 800,000 tonnes. The majority of these materials are inert, although some biodegradable and hazardous materials can also occur. Capacity for managing CD&E waste is often provided alongside capacity for other waste streams. Whilst this can increase the overall range of management options for these materials, it can also make it difficult to identify definitively the capacity currently available for this specific waste stream and hence the exact size of any potential capacity gap. However, the Waste Arisings and Capacity Assessment (2016) (updated March 2017) identifies an expected capacity gap for recycling under all scenarios considered, up to a maximum of approximately 437,000 tonnes per annum in the highest case scenario, based on available capacity for managing CD&E waste only. Recycling of CD&E waste tends to be more economically viable at localised facilities due to the costs of transporting lower value, higher density wastes. It can also be achieved by mobile plant working at demolition sites, as well as at fixed facilities, thus providing a range of routes by which it can be achieved.

³⁹ Yorkshire and Humber Waste Position Statement (Feb 2016)

⁴⁰ Sites in Yorkshire and Humber with capacity for landfill of hazardous waste include Bradley Park Landfill in West Yorkshire, Gallymoor Landfill in the East Riding Council area and Winterton South Landfill in North Lincolnshire. Further capacity for hazardous landfill exists in the Tees Valley.

- 6.71 There is no overall gap in transfer capacity for CD&E waste. However, as with other waste streams, policy support for further capacity is justified in order to provide opportunities for enhancement of the geographic network and to help to reduce overall impacts from road transport of waste.
- 6.72 Hazardous Construction and Demolition waste, such as asbestos contaminated waste, is currently exported for landfill and this remains the only management option for this waste. 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.
- 6.73 There is a forecast shortfall in capacity for landfill of non-hazardous CD&E waste, particularly from around 2022, as a result of the expiry of a number of time limited permissions, with a maximum annual gap of around 108,000 tonnes per annum by 2030 in the highest case scenario. However, there may be more potential for increased use of this waste as a resource, to reduce the need for landfill further (for example by using it as a resource in engineering projects) and this management route should also be supported for this waste stream. If rates of recycling nearer to that modelled in the higher recycling scenario included in the waste arisings and capacity assessment are achieved, then the requirement for capacity for landfill of non-hazardous CD&E waste could be significantly less, reaching a maximum of around 18,000 tonnes per annum by 2030. The support for retention of landfill capacity at the Allerton Park and Harewood Whin sites, provided through Policies W03 and W04, could also play a role in helping to provide for landfill needs for this waste stream if required.

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

- 1) Net self-sufficiency in capacity for management of CD&E waste will be supported through:**
 - i) Permitting proposals which would deliver increased capacity for recycling CD&E waste where the development would be consistent with the site locational and identification principles in Policies W10 and W11;**
 - ii) Permitting proposals for additional transfer station capacity for CD&E waste where it can be demonstrated that additional provision would help reduce overall impacts from road transport of waste and the development would be consistent with the site locational and identification principles in Policies W10 and W11;**
 - iii) Permitting proposals for additional landfill capacity for CD&E waste where it would be consistent with the principles set out in Policy W01 parts 3) and 4);**
 - iv) Permitting proposals for extending the time allowed to use remaining void space at existing CD&E landfill sites that are the subject of time-limited permissions.**
- 2) Provision of capacity for management of CD&E waste is also supported through site allocations for:**
 - i) Allocations for recycling of CD&E waste:**

Land at Potgate Quarry, North Stainley (WJP24), in Harrogate Borough
Land at Allerton Park, near Knaresborough (WJP08), in Harrogate Borough

<p>Land at Darrington Quarry, Darrington (MJP27), in Selby Distict Land at Barnsdale Bar, Kirk Smeaton (MJP26) in Selby Distict Land at Went Edge Quarry, Kirk Smeaton (WJP10) in Selby Distict Land to the west of Newlands Lane, Upper Poppleton (WJP05), in the City of York Whitewall Quarry, near Norton (MJP13), in Ryedale District</p>	
<p>ii) Allocations for landfill of CD&E waste:</p>	
<p>Land at Brotherton Quarry, Burton Salmon (WJP21), in Selby Distict Land to the west of Newlands Lane, Upper Poppleton (WJP05), in the City of York Land adjacent to former Escrick Brickworks, Escrick (WJP06), in Selby Distict</p>	
<p>Proposals for landfill at sites WJP05 and WJP06 will only be permitted as a means of enabling reclamation of any mineral workings developed in connection with allocations MJP52 and MJP55 as relevant.</p>	
<p>Sites MJP26, MJP27, WJP10 and WJP05 are located in the Green Belt and any development will need to comply with relevant national and local Green Belt policy.</p>	
<p>Proposals for development of the allocated sites for recycling or landfill referred to in 2) above, and as shown on the Policies Map, will be required to take account of the key sensitivities and incorporate the necessary mitigation measures that are set out in Appendix 1.</p>	
<p>Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p><i>M11, W01, W02, W03, W04, W10, W11, D01, D02, D05, D07, D09, D10</i></p>	<p><i>Objectives 1, 2, 4, 6, 7</i></p>
<p>Monitoring: Monitoring indicator 30 (see Appendix 3)</p>	

Policy Justification

- 6.74 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. In many cases such material does not enter the wider waste market. Managing CD&E waste in this way is usually the most sustainable option and often may take place without a specific need for grant of planning permission. Policy M11 supports the separation and maximum recovery of materials with potential for re-use or recycling as aggregate, where they are produced during demolition activity or as part of other waste management activity.
- 6.75 A need for additional capacity for managing CD&E waste has been identified in evidence for the Joint Plan. This includes a requirement for both additional recycling capacity and additional landfill capacity, although the scale of additional requirements cannot be defined precisely and also depends on the future rates of recycling which can be achieved, suggesting a need for some flexibility in the Joint Plan. Provision of additional infrastructure for recycling of CD&E waste is supported through the positive approach set out in Part 1) i) of the Policy and could reduce the need for landfill of this waste stream. Proposals coming forward under this part of the Policy

could be at a range of scales provided that they would be consistent with Policy W10 addressing Overall locational principles for provision of waste management capacity and consistent with Policy W11 dealing with Waste site identification principles. Where sites considered suitable in principle for recycling of CD&E waste have been proposed for consideration, these are allocated in the Plan to provide further opportunities for the delivery of additional capacity. The combined capacity in these allocations would significantly reduce the projected capacity gap. Applications for development of these sites for the proposed use will be considered against other relevant policies, including the development management policies in Chapter 9. It should be noted that a number of other sites allocated in the Joint Plan may also be able to play some role in managing CD&E waste alongside other major waste streams such as LACW and C&I waste and this could further reduce any capacity gap for this waste stream.

- 6.76 Sustainability principles indicate that 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 planning permission for this activity. Consultation with the minerals industry suggests that there have been increasing difficulties in sourcing suitable inert wastes for quarry reclamation purposes. Ensuring a high standard of quarry reclamation takes place remains an important objective of both national planning policy and 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 CD&E 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 Policy W01 relating to the waste hierarchy. Where suitable sites for landfill of CD&E waste have been put forward for consideration, and could help meet needs for landfill of CD&E waste, particularly in the latter part of the plan period, these have been allocated in the Joint Plan. It is also likely that non-inert landfills in the Plan area, such as those suitable for residual LACW and C&I waste, can play a role in providing capacity for landfill of CD&E waste as a result of the need for importation of suitable inert material for cover and restoration purposes. This could further reduce the apparent capacity gap. The Environment Agency have estimated that around 25% of the total capacity of non-inert landfills could be taken up by inert materials for these purposes.
- 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 volume of such waste arising means that provision of capacity in the area is unlikely to be practicable. Such waste is currently exported and liaison with other relevant WPAs suggests that there is likely to be potential for such exports to continue over the Plan period.

Agricultural Waste

- 6.78 The 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 Waste Management Plan for England.

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 permitted where the proposed development would assist in moving waste up the waste hierarchy and would be appropriately scaled in relation to the arisings requiring management.

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 permitted where they would be consistent with the overall locational principles and site identification principles for waste development in Policies W10 and W11 and would help to move waste up the waste hierarchy in accordance with Policy W01.

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

Key links to other relevant policies and objectives

W01, W02, W10, W11, D01, D07, D09

Objectives 1, 2, 7

Monitoring: Monitoring indicator 31 (see Appendix 3)

Policy Justification

- 6.79 The potential requirements for off-farm disposal of agricultural waste (estimated at around 34,000 tonnes per annum⁴¹) have been included in the provision for C&I waste in the figures presented earlier in this Chapter. 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 animal 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. Feedstock grown specifically for use in anaerobic digestion facilities is not considered to be waste and therefore falls outside the scope of this Policy.
- 6.80 It may be practicable for management of agricultural waste to take place at the scale of an individual farm holding, depending 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, including for non-organic waste such as plastic and metals. Both approaches may be appropriate within the area, depending on the local circumstances, and in order to provide flexibility, both are supported in the Policy subject to compliance with other relevant policies in the Joint Plan.

Low-Level (Non-Nuclear Industry) Radioactive Waste (LLR)

- 6.81 There is relatively limited evidence on arisings of LLR waste in the Plan area and the means by which it is managed. Available evidence suggests current arisings are

⁴¹ North Yorkshire Sub Region Waste Arisings and Capacity Requirements Update Report September 2016 (Urban Vision)

very low. However, there is potential for a significant increase in arisings of waste, particularly waste water, containing Naturally Occurring Radioactive Materials (NORM) should shale gas development activity become established in the area on any significant scale. National policy indicates that local plans for waste should address the need to manage this waste stream. The approach to management of LLR waste arising from oil and gas development is addressed in Policy M18 and through Policies W10 and W11. The main focus of Policy W07 below is therefore on the management of LLR waste arising from forms of development other than those relating to hydrocarbons.

Policy W07: Managing low level (non nuclear industry) radioactive waste

Proposals for management of Low Level Radioactive Waste arising in the Plan area will be permitted where they would assist in moving management of the waste up the waste hierarchy through on site treatment and reuse or, where this is not practicable, enable the on site disposal of the waste at the point of arising.

Proposals for new capacity, where this would not be located at the point of arising, should be in line with the requirements of Policies W10 and W11 and other relevant policies in the Joint Plan.

Capacity requirements which cannot be met within the Plan area will be met through export.

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

Key links to other relevant policies and objectives

M18, W01, W02, W10, W11, D01, D07

Objective 2

Monitoring: Monitoring indicator 32 (see Appendix 3)

Policy Justification

- 6.82 The amount of low level radioactive waste arising from non-nuclear industry sources (such as research and medical services) in the area is very small (estimated at less than 50m³ per annum). The Environment Agency has indicated that premises in North Yorkshire that generate radioactive waste currently dispose of that waste either under exemption as Very Low Level Waste, or to sewer or by transfer to permitted clinical waste incinerators, including in West Yorkshire.
- 6.83 There is no specific capacity in the area for the landfill of LLR waste, with the nearest dedicated landfill at Clifton Marsh in Lancashire, although there is no information to suggest that waste from the area is deposited at that facility. A nationally significant repository for radioactive waste is located near Drigg in Cumbria, although again there is no evidence to suggest that any waste from the Plan area is managed at that site.
- 6.84 There is no specific information available on expected future trends in arisings of LLR waste, although it is possible that growth in the scientific employment sector in York could lead to some increase in future. However, overall volumes from such sources are expected to remain very small. Evidence indicates that there is capacity in the Yorkshire and Humber area to deal with such wastes, including the Knostrop facility in Leeds, which is also likely to represent the nearest appropriate installation for the treatment and disposal of some forms of LLR waste. Where it is not practicable to provide more local solutions for managing this waste then continued reliance on export is likely to be required.

- 6.85 There is also the substantial volumes of Naturally Occurring Radioactive Materials (NORM) to be generated if exploration, appraisal or development of shale gas takes place in the Plan area. Flowback fluids from hydraulic fracturing in particular can constitute a significant source of NORM, depending on the local geology, although smaller volumes of other wastes containing NORM may also arise. It is not practicable to predict the potential volumes that could arise at this very early stage in development of the industry. The approach to managing waste water from the oil and gas industry is addressed through Policy M18 and Policies W10 and W11.
- 6.86 National policy and strategy applies the principles of the waste hierarchy to LLR waste (including NORM) and it is appropriate to support the principle of providing local capacity for managing this waste stream where practicable.
- 6.87 Where proposals for new capacity for the management of LLR waste including NORM come forward in the Plan area, these will be addressed under the requirements of Policies W10 and W11 and other relevant policies in the Joint Plan, including the development management policies in Chapter 9.

Waste Water and Sewage Sludge

- 6.88 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 some additional waste water treatment capacity to be provided without needing to apply formally for planning permission. However, in some circumstances an application for planning permission will be required and it is appropriate to include policy in the Joint Plan to provide a basis for decision-making if proposals do come forward. Since work started on the Joint Plan there has been potential for large volumes of waste water to be generated as a result of development for the exploration, appraisal and production of shale gas and other unconventional hydrocarbon sources. The policy approach for such wastes is set out in Policy M18 and Policies W10 and W11. The main focus of Policy W08 below is therefore on the management of waste water and sewage sludge arising from forms of development other than those relating to hydrocarbons.

Policy W08: Managing waste water and sewage sludge

- 1) Proposals for the development of new infrastructure and increased capacity for the management of waste water and sewage sludge, not including waste water from hydrocarbon activities, will be permitted 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 requirements of Policies W10 and W11.**
- 2) 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 Joint Plan can be demonstrated.**

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

Key links to other relevant policies and objectives

M18, W01, W02, W10, W11, D01	Objectives 1, 2, 6, 7
Monitoring: Monitoring indicator 33 (see Appendix 3)	

Policy Justification

- 6.89 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. Information from 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 to develop new sites. Providing some flexibility for this in the Joint Plan is appropriate in order to ensure that adequate opportunities for development of capacity are available.
- 6.90 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 to move this waste further up the hierarchy through reducing landfilling and recovering energy. In some instances, particularly for larger scale waste water treatment works, it may be appropriate to co-locate anaerobic digestion capacity at the site as this would reduce the 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 Joint Plan can be achieved.

Power Station Ash

- 6.91 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 increasing such use is provided in the policy dealing with Supply of Alternatives to Land Won Primary Aggregate (Policy M11). Potential requirements for colliery spoil disposal are also addressed in more detail in the Minerals Chapter (Policy M20).

Policy W09: Managing power station ash and Incinerator Bottom Ash

Proposals to increase the utilisation of power station ash and Incinerator Bottom Ash as secondary or recycled aggregate or for other beneficial use, in line with Policy M11 for the Supply of Alternatives to Land Won Primary Aggregate, will be permitted.

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 and Barlow ash disposal sites, which are safeguarded as strategic sites for the disposal of waste.

Proposals for new facilities for the management of power station ash and Incinerator Bottom Ash will be determined in accordance with the requirements of Policies W10 and W11.

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

Key links to other relevant policies and objectives

<i>M11, M20, W01, W02, W10, W11, S03</i>	<i>Objectives 1, 2, 4, 6, 7</i>
Monitoring: Monitoring indicator 34 (see Appendix 3)	

Policy Justification

- 6.92 Waste ash arising from the major coal and biomass fired power stations in Selby District is dealt with at dedicated private facilities and does not ‘compete’ with other waste for capacity at facilities available to the market. However, because of the large volumes involved, this is an important waste stream in the area. Ash from Drax power station is disposed of at the adjacent Barlow Ash disposal mound. 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 has been 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. Capacity at this latter facility is also understood to be sufficient. However, coal fired generation at Ferrybridge closed in March 2016 and disposal capacity within the Plan area for this is no longer expected to be required.
- 6.93 Whilst there has been recent investment in infrastructure to support increased utilisation of power station ash as secondary aggregate, and this is supported through Policy M11, it is expected that large volumes will continue to require disposal. Well established long-term disposal arrangements are in place for each of the two main power stations in the Plan area and it is expected that these arrangements will need to continue over the life of the Joint Plan. The main ash disposal sites are strategically important waste management facilities in the area and it is appropriate to safeguard them to ensure their availability for the future. This is addressed under Policy S04 ‘Waste Management Facility Safeguarding’.
- 6.94 More recently, there has been potential for increased arisings of Incinerator Bottom Ash as a result of a number of proposals coming forward in the area for development of waste-to-energy capacity. Policy M11 supports the use of such material as secondary aggregate. The only large scale energy from waste capacity currently under construction in the area is the Allerton Waste Recovery Park facility. The permitted development includes provision for recycling of Incinerator Bottom Ash. It is also possible that proposals may come forward for management of Incinerator Bottom Ash arising from other energy from waste facilities which have received permission in the area. Where proposals come forward for disposal or processing of ash, including Incinerator Bottom Ash, they will be considered under Policies W10 and W11 and other relevant policies in the Joint Plan as appropriate.

Overall locational approach to provision of waste management capacity

- 6.95 In deciding on an overall approach to locating 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 main settlements and future growth, major environmental designations and transport networks;
 - National policy requirements relevant to locating waste facilities.

- 6.96 The existing network of facilities in the Plan area is widely distributed, but in general is associated with the more developed parts of the area and main road transport links, reflecting key sources of arisings and the important role of road transport in the management of waste. The large majority of remaining capacity for landfill of biodegradable waste is now 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 more 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.

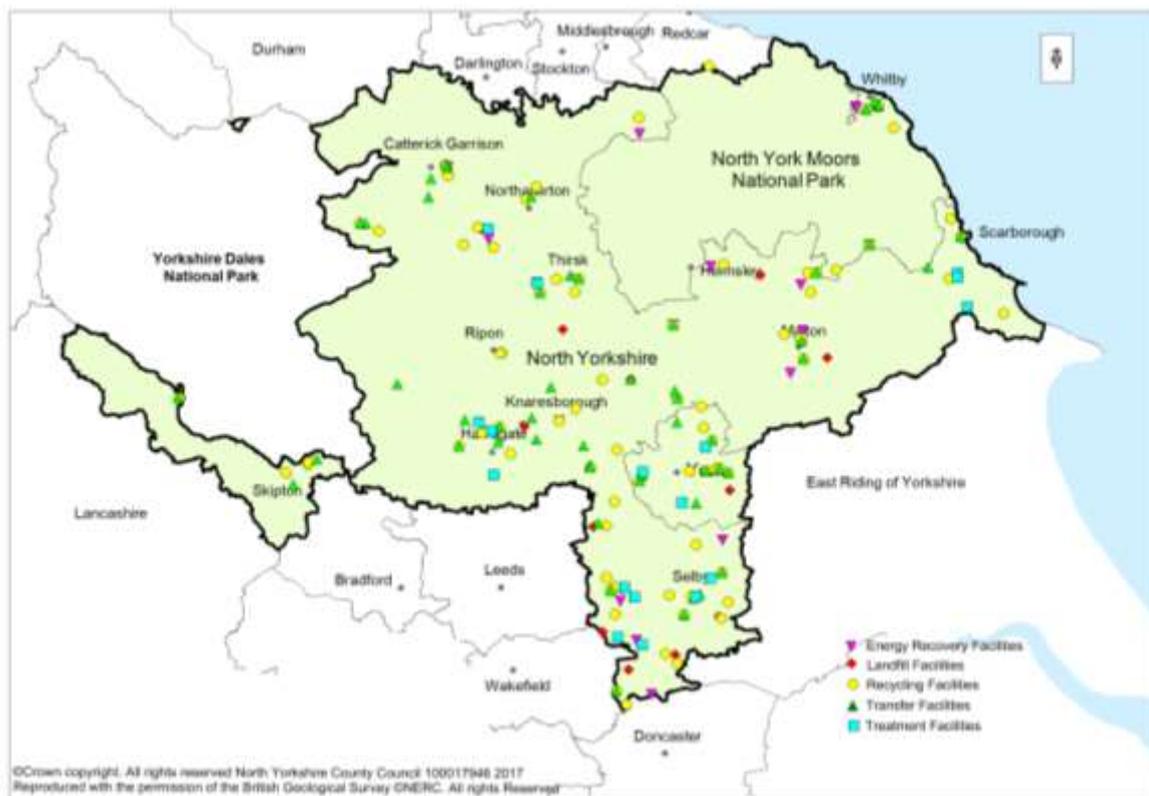


Figure 17: Permitted waste facilities in Plan area

- 6.97 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 are 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 and transport corridors, as shown on the key diagram. Substantial parts of the Joint Plan area are highly constrained by environmental designations, such as National Park and AONBs, as well as important nature conservation, historic environment and other designations, such as Green Belt and the requirement to protect the historic character and setting of York, which would be likely to preclude development of significant new waste facilities as a result of national policy constraints.
- 6.98 Access by road is good in some parts of the area, particularly in terms of north-south links through the central corridor, whereas east-west accessibility is less well developed. 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.

- 6.99 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.
- 6.100 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 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 a particular issue for the Plan area which, as noted above, is largely rural. Policy W10 sets out the main locational principles relevant to identifying site allocations and provision of additional capacity for management of waste.

Policy W10: Overall locational principles for provision of waste management capacity

The allocation of sites and determination of planning applications should be consistent with the following principles:

- 1) Providing new waste management capacity 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.**
- 2) Maximising the potential of the existing facility network by supporting the continuation of activity at existing time limited sites with permission, the grant of permission for additional capacity and/or appropriate additional or alternative waste uses within the footprint of existing sites and, the extension to the footprint of existing sites.**
- 3) Supporting proposals for development of waste management capacity at new sites where the site is compatible with the requirements of 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 facilities serving district scale markets for waste, particularly LACW, C&I and CD&E waste, or for facilities which are not intended to serve the specialised needs of particular industries or businesses, 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 localised needs for 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 (e.g. serving multi-district scale catchments or which would meet specialised needs of particular industries or businesses), 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	
<i>M18, W01, W02, W03, W04, W05, W06, W07, W08, W09, W11, D07</i>	<i>Objectives 2, 6, 7, 8, 9, 10, 11</i>
Monitoring: Monitoring indicator 35 (see Appendix 3)	

Policy Justification

- 6.101 Arisings of waste in the NYMNPA and AONBs are 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.
- 6.102 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 will have benefits for the local economy and assist in ensuring 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 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, and or additional or alternative waste uses which are compatible with the location of the site and any relevant constraints, including the potential for impact on local communities, 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 by 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 Joint Plan, is supported in principle.
- 6.103 National planning policy encourages the provision of an integrated and adequate network of facilities which enables waste to be disposed of, and mixed municipal waste collected from private households to be recovered in, one of the nearest appropriate installations. Supporting the management of waste near to where it arises, as well as encouraging communities to take responsibility for the waste arising in their area, are important components of sustainability. In particular it can reduce the amount of transport required, with corresponding benefits for local amenity and reduced environmental impacts in what is a predominantly rural area with a relatively sparse network of major roads. This suggests that, where practicable, new sites for waste management should be well-located in relation to the sources of the 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, where new development is proposed to deal with such arisings, it is located within or in close proximity to the main settlements in the Plan area. For waste more closely associated with rural activities (such as agricultural waste or waste from other businesses taking place in rural areas) it will be preferable for these to be located within the catchment areas they are intended to serve, even where these are not located in close proximity to main settlements, in order to help to reduce overall transportation impacts. For some types of waste

management development outside urban areas, Green Belt designation is 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.

- 6.104 If shale gas development becomes established on any significant scale in the area (see Chapter 5), there could be a potential for new arisings of waste from this source which, based on current information, would be generated within relatively rural locations in the eastern part of the Plan area where the majority of current PEDLs are located. In considering proposals for management of waste from such development, Policy M18 is also relevant.
- 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 a combination of the two factors. This means that they are likely to serve geographically more 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 where new such facilities are proposed, they are well located in relation to the overall catchment area to be served, as well as in relation to the main transport networks that are 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 Joint Plan, including the site identification principles in Policy W11 and the development management policies in Chapter 9.

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 new waste management uses. This can provide a basis for identifying 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 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 biodegradable 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 to 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, particularly for larger scale facilities of a more industrial nature, are likely to be relatively limited, although 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

The allocation of sites and determination of planning applications for new waste management facilities should be consistent with the following principles:

- 1) Siting facilities for the preparation for re-use, recycling, transfer and treatment of waste (excluding energy recovery or open composting) on previously developed land, industrial and employment land, or at or adjacent to 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 for the open composting of waste on previously developed land, industrial land, existing waste management sites and, where the site or facility is proposed to deal with small scale waste arisings in rural areas, the curtilage of redundant agricultural buildings or other appropriate on-farm locations. Where development of new capacity on greenfield land is necessary then preference will be given to sites located on lower quality agricultural land. Sites for the composting of waste where the process may release bioaerosols should be located at least 250 metres from the nearest residential building;**
- 3) Siting facilities involving the recovery of energy from waste, including through anaerobic digestion, 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**

<p>buildings or their curtilages and other appropriate on-farm locations will also be acceptable in principle;</p>	
<p>4) 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 1) above, where these are well related to the sources of arisings and/or markets for the end product;</p>	
<p>5) Siting facilities to provide additional waste water treatment capacity, including for waste water containing Naturally Occurring Radioactive Materials and hazardous waste, 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. Siting of facilities for management of waste water from hydrocarbons development will also be considered under the requirements of Policy M18 where relevant;</p>	
<p>6) 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 any pollution control concerns can be mitigated to an acceptable level.</p>	
<p>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.</p>	
<p>Main responsibility for implementation of policy: NYCC, CYC, NYMNP and Waste Industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p><i>W01, W02, W03, W04, W05, W06, W07, W08, W09, W10, M18, Development management policies in Chapter 9</i></p>	<p><i>Objectives 2, 6, 7, 8, 9, 10, 11</i></p>
<p>Monitoring: Monitoring indicator 36 (see Appendix 3)</p>	

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 Joint Plan of the types of sites that are likely to be considered suitable in principle for waste management facilities by the Authorities when determining planning applications.

6.114 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 Joint Plan.

- 6.115 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 also need to be taken into account alongside any other relevant policies in the Joint Plan.

Chapter 7: Minerals and Waste Transport and Other Infrastructure

- 7.1 This Chapter 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 Plan area. It identifies policies to help 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 Plan area is transported by road via the existing highway network. Road transport is not usually the most sustainable form of transport due to emissions, congestion and other impacts, including on local amenity. However, in many cases it may be the only viable option because of the absence of suitable alternatives, or because the scale or pattern of movements involved does not justify the investment required to bring alternative arrangements in to use. Key exceptions to road transport of minerals in the area include gas, which is transported by pipeline from production wells to the Knapton generating station, potash from Boulby Mine which is transported by rail and the importation of small amounts of aggregate by rail 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 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 alternative transport modes, suggests that this is an issue the Joint 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 minerals and waste 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 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 until recently coal was transported by rail from Kellingley Colliery, where infrastructure still exists. More recently, a 37km underground tunnel and conveyor system have been approved as part of the York Potash application to transport polyhalite from Woodsmith Mine, near Whitby, to a handling facility at Wilton on Teesside. The map below shows the rail and waterways network as well as known locations of existing rail and water transport infrastructure in the area. These have been identified 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.

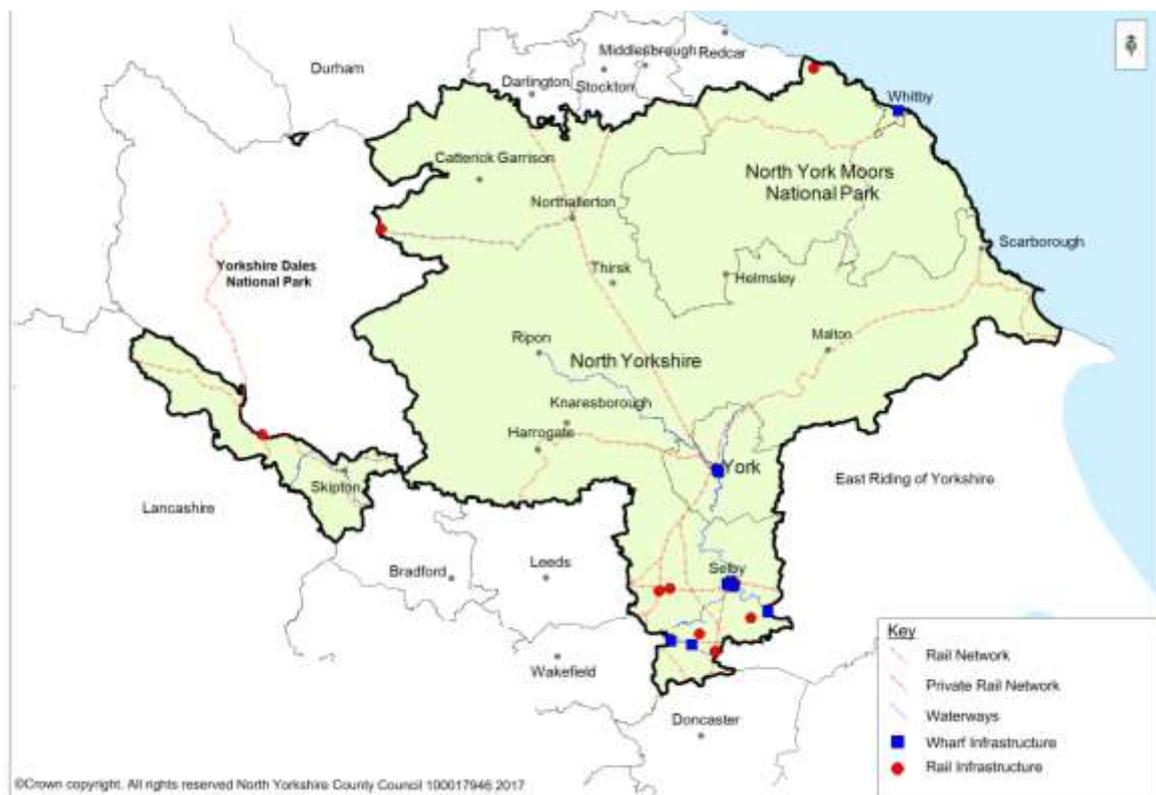


Figure 18: Wharf and rail infrastructure

- 7.5 A shift towards increased use of rail or water transport in the Plan area would most likely arise through bringing into use existing infrastructure which is currently inactive, as this is likely to require less investment, and where substantial volumes of minerals or waste require transporting to particular destinations for sale or processing and the need for double handling can be avoided or minimised.

Policy I01: Minerals and waste transport infrastructure

- 1) The development of rail, water, pipeline or conveyor transport infrastructure, or use of existing infrastructure, will be encouraged and permitted 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.
- 2) Where proposals for minerals or waste development would be located in close proximity to an existing wharf or rail head, they should include information to demonstrate that the potential for use of such facilities has been considered and, where practicable, should prioritise use of alternatives to road transport.

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 Joint 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.

- 3) 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)	
Proposals for development of this site will be required to take account of the key sensitivities and incorporate the necessary mitigation measures that are set out in Appendix 1.	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals and Waste Industry	
Key links to other relevant policies and objectives	
<i>I02, S04, D01, D02, D03, D05, D07, D11</i>	<i>Objectives 6, 7, 8, 10, 11</i>
Monitoring: Monitoring indicator 37 (see Appendix 3)	

Policy Justification

- 7.6 National policy encourages use of alternatives to road transport wherever feasible and their use can have benefits in terms of reducing overall environmental and amenity impacts on the environment and local communities.
- 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 or under-used infrastructure rather than building 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 For minerals and waste development proposals which are located in close proximity to sustainable transport infrastructure, it is important that consideration is given to the potential for such facilities to be used. The undertaking of a Transport Assessment (see Policy D03) provides an opportunity to address this issue.
- 7.9 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). It is therefore important that locations for non-road transport infrastructure for minerals and waste are also well located in relation to the main road network, to 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, proposals 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 impact on the environment or local communities does not arise.
- 7.11 During preparation of the Joint 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 to 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 Joint Plan as an allocation for rail reception, handling and onward distribution of aggregate.

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 routine processing activities, together with their associated plant and buildings, may constitute permitted development under the Town and Country Planning (General Permitted Development) (England) 2015 Order. Where they do not, and a planning application is required to be submitted, this will be considered against the development management policies in Chapter 9.
- 7.13 In some cases quarries, or sites for the supply of secondary or recycled aggregate, may also host specialist plant or operations 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 all depend on the availability of mineral as a key raw material, but are not in themselves essential for the initial extraction and processing of the primary mineral itself. Where ancillary infrastructure is located at the site of extraction, this can have the benefit of adding value before the raw material leaves the site and thus help reduce the overall volume of material transported. It can also enable provision of range of complementary products from a single location. Processing infrastructure for hydrocarbon development is addressed in the Hydrocarbons (oil and gas) section in Chapter 5.
- 7.14 However, such development is not constrained to a particular location in the way minerals extraction is and, in some instances, infrastructure of this type may be in 'freestanding' locations, such as on industrial or employment land. In some cases this can represent a more sustainable approach, particularly where a wide range of minerals or other raw materials, not available at the 'host' quarry site, are required as part of the process.
- 7.15 Supply of recycled aggregate is partly dependent upon the amount of construction, demolition and excavation waste (CD&E) that is produced, which in turn is influenced by the level of construction activity taking place. Recycled aggregate may be produced from CD&E waste at certain types of waste management sites and some construction sites use mobile equipment to convert CD&E waste 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 CD&E waste is already high. To ensure this is maintained sites and proposals in suitable locations which would help reduce or recycle CD&E waste should be supported by policy.

Policy I02: Locations for ancillary minerals infrastructure

- 1) Development of ancillary minerals infrastructure at active minerals extraction sites and sites producing secondary aggregate will be permitted provided the following criteria are met:**
- i) The ancillary development produces a 'value added' or complementary product based mainly on the mineral extracted or secondary aggregate produced on the host site; and**
 - ii) The development would not have significant additional adverse impact on local communities, businesses or the environment; and**
 - iii) The development would not unacceptably increase the overall amount of road transport to or from the host site; and**

<p>iv) Where the host site is located in the Green Belt the ancillary development is acceptable in accordance with national and local Green Belt policy; and</p> <p>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.</p>	
<p>2) In addition, within the City of York area, development of ancillary minerals infrastructure will only be permitted provided the following criteria are met:</p> <p>i) The site would be located on industrial or employment land, previously developed land, or would be co-located with other compatible industrial or commercial development; and</p> <p>ii) The site has good access to the transport network; and</p> <p>iii) The development would not have significant adverse impact on local communities, businesses or the environment including heritage assets.</p>	
<p>3) In addition to the requirements of Part 1), within the North Yorks Moors National Park the siting of ancillary minerals infrastructure will only be supported where it would be located within the existing operational surface site on other existing industrial land, within the Whitby Business Park or is constrained to a particular location for which there is sufficient overriding justification.</p>	
<p>Main responsibility for implementation of policy: NYCC, CYC and NYMNP and Minerals Industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p><i>M11, W05, W09, S05, D01, D02, D03, D04, D05, D09, D10, D11</i></p>	<p><i>Objectives 6, 7, 8</i></p>
<p>Monitoring: Monitoring indicator 38 (see Appendix 3)</p>	

Policy Justification

- 7.16 Within the part of the Plan area that has a two-tier planning structure, 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 to 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 in relation 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. Minerals extraction sites may sometimes be located in the Green Belt. Where ancillary development is proposed in such locations it will be important to ensure that it would not compromise the purposes of Green Belt designation or the openness of the Green Belt. Long-term retention of

infrastructure, beyond the associated period of mineral extraction, will not be appropriate in such locations.

- 7.19 There is currently no ancillary infrastructure located at any 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 and a mineral railway is in place to transport material from the Boulby potash mine to Teesport. 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, unless it would be located within the Boulby potash mine surface site or, if developed, the Woodsmith Mine surface site.

Chapter 8: Minerals and Waste Safeguarding

- 8.1 Safeguarding of minerals resources, and of minerals and waste infrastructure, is an important aspect of national policy and necessary to help to ensure the long-term sustainability of the area. This Chapter 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 safeguarded resource or 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 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/Borough 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 Joint Plan. A schedule of minerals and waste infrastructure sites to be safeguarded is provided in Appendix 2.

Safeguarding of Mineral Resources

- 8.5 Effective safeguarding of minerals helps to 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 is therefore prudent to safeguard a limited buffer zone around the resource. The purpose of the buffer zone is 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 NYMNPAs areas. The reports are available to view at www.northyorks.gov.uk/mwevidence.
- 8.7 Whilst safeguarding is primarily concerned with managing potential conflict between surface 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. Whilst the Plan area has a range of deep mineral resources: coal (including coal bed methane), gas (including shale gas), gypsum, potash, polyhalite and salt; a particular consideration is the potential for hydrocarbon 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: Safeguarded 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 non-mineral 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.**

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, M20, M21, M22, S02

Objective 3

Monitoring: Monitoring indicator 39 (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 minerals safeguarding 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 is 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. Although glacio-lacustrine deposits are not specifically proposed for safeguarding in the work undertaken by BGS, as a result of their relatively low quality, representations from the minerals industry suggest that they may become of greater commercial relevance in the future as a source of aggregate, as higher quality fluvial and fluvio-glacial deposits become more difficult to source. Information has been obtained from BGS on the distribution of glacio-lacustrine deposits and these are also safeguarded in the Joint Plan.
- 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 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. The work 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.

- 8.11 The BGS reports identified the resources of clay that should be the 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 there is no recent history of shallow coal working in North Yorkshire, the Coal Authority recommends safeguarding the resource. The BGS reports for NYCC and the NYMNP 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 of commercial interest is less detailed 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 within the Plan area, in consultation with building stone specialists, which has led to a number of scarcer mineral resources being identified, 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 areas identified in this way. In order to address this issue, BGS have suggested that active quarries lying outside the proposed safeguarding areas are also safeguarded, by defining a 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, it 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.

Development in Minerals Resource Safeguarding Areas

- 8.15 This section sets out how applications for development proposed in Minerals Resource Safeguarding Areas will be assessed.
- 8.16 As a two-tier planning system exists in the NYCC planning authority area, the District and Borough councils in that area will be responsible for ensuring that development proposals that they determine in Safeguarding Areas are assessed appropriately. This can be done by using defined Minerals Consultation Areas, within which the District/Borough Councils would consult with NYCC, as minerals planning authority, before decisions are taken on certain forms of development which could sterilise minerals resources. Policy S07 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 Chapter.

Policy S02: Developments proposed within-Safeguarded Surface Mineral Resource areas

Within the Safeguarded Surface Minerals Resource 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**

<p>ii) The mineral will be extracted prior to the development (where this can be achieved without unacceptable impact on the environment or local communities), or</p> <p>iii) The need for the non-mineral development can be demonstrated to outweigh the need to safeguard the mineral; or</p> <p>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</p> <p>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</p> <p>vi) It constitutes ‘exempt’ development (as defined in the Safeguarding Exemption Criteria list), as set out in paragraph 8.55).</p>	
<p>Applications for development other than mineral extraction in Safeguarded Surface Minerals Resource areas should include an assessment of the effect of the proposed development on the mineral resource beneath or adjacent to the site of the proposed development.</p>	
<p>Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry and District and Borough Councils</p>	
<p>Key links to other relevant policies and objectives</p>	
<p>S01, S04, S05, S06</p>	<p>Objective 3</p>
<p>Monitoring: Monitoring indicator 40 (see Appendix 3)</p>	

Policy Justification

- 8.17 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 Joint 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 Criteria list in para. 8.55) is proposed in a safeguarded area for surface mineral resources applicants should consider at an early stage any implications that the presence of the safeguarded resource may have for their proposals and include information in any application, via a mineral resource assessment, 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.
- 8.23 Certain forms of surface development are unlikely to lead to significant sterilisation of minerals resources, even when proposed in a safeguarded area. These are identified in the Safeguarding Exemptions Criteria 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 such proposals.
- 8.24 To implement an approach to safeguarding in the two-tier part of the 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 later in this Chapter.

Policy S03: Safeguarded Deep Minerals Resource areas

Part 1) – Safeguarding potash from surface development vulnerable to subsidence:

Potash (including polyhalite) resources expected to be recovered by the Woodsmith Mine over its permitted life are identified on the Policies Map for safeguarding, and will be safeguarded from the following forms of non-mineral surface developments to protect the resource for the future;

- Large institutional and public buildings;
- Major industrial buildings and other industrial buildings and infrastructure 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;
- Wind turbines;

Permission for the above forms of development will be granted where it can be demonstrated that a significant risk of sterilisation of the safeguarded mineral deposits would not arise, or the need for the surface development would demonstrably outweigh the need to safeguard the mineral deposit.

Part 2) – Protecting potash (including polyhalite) resources from other underground minerals development:

Potash (including polyhalite) resources expected to be recovered by the Woodsmith Mine over its permitted life, identified on the Policies Map for safeguarding, will also be protected from sterilisation by other forms of underground minerals extraction, deep drilling and the underground storage of gas or carbon in order to protect the resource for the future.

Where proposals for deep drilling or development of underground gas resources or the underground storage of gas or carbon are located within the area safeguarded for potash (including polyhalite) shown on the Policies Map, permission for development will be granted where it can be demonstrated that the proposed development will not adversely affect the potential future extraction of the protected mineral, or the benefits of the proposed development would demonstrably outweigh the need to safeguard the resource.

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, M20, M21, M22,

Objective 3

Monitoring: Monitoring indicator 41 (see Appendix 3)

Policy justification for safeguarding of Potash and Polyhalite Resources

- 8.25 Underground mineral resources are not at direct risk of sterilisation through non-mineral surface development in the same way as surface resources and there is no specific requirement in national policy to safeguard them within protected areas. 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.
- 8.26 Potash, including polyhalite resources in the Plan area are considered to be of strategic significance, as the potash and polyhalite deposits are the only known potentially workable resources in the country and planning permission currently exists for their extraction. Whilst remaining resources associated with the Boulby Mine are understood to be located offshore, resources permitted for extraction through the new Woodsmith Mine, currently under construction, underlie the eastern part of the National Park. Diagram (Figure 19) shows the location of the potential sources of potash and polyhalite in relation to the Woodsmith Mine permission area, the National Park Boundary, the remainder of the Plan area and adjacent areas of East Yorkshire. The permitted life of mineral extraction at the Mine is approximately 100 years. It is therefore considered that there is particular justification to safeguard appropriate resources for the future.

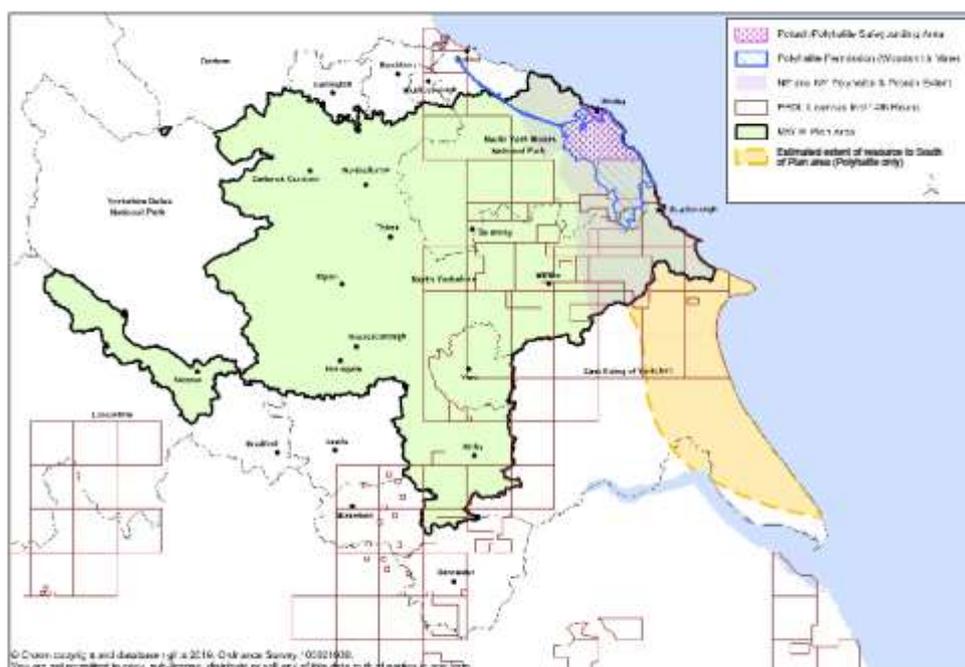


Figure 19: Potash minerals map:

- 8.27 Extensive resources of potash and polyhalite exist in the north-eastern part of the Plan area and also extend southwards beyond the Plan area boundary, into the East Riding of Yorkshire down to Kingston upon Hull, as shown in Figure 19. Available information suggests that the resource, which is already at a very substantial depth below ground level, gets significantly deeper to the south, beyond the National Park boundary, and is also extensively faulted in the Vale of Pickering area, to the extent that extraction is not expected to be technically feasible or economically viable within the current Plan period. Furthermore, a large area of the resource within the Plan area is located beneath the North York Moors National Park, where the risk of sterilisation as a result of significant surface development is relatively low as a

consequence of national and local policies restraining major development. However, notwithstanding this position, it is appropriate to safeguard an area of resource expected to be sufficient to cover the duration of the permission that has been granted. The extent of the area identified on the Policies Map for safeguarding includes those resources that have been identified with a higher degree of confidence (i.e. the indicated and inferred resources) as well as adjacent areas expected to be required to sustain the Mine over its permitted life. This will help to ensure that, where certain types of surface development, sensitive to subsidence, are proposed within the safeguarded area, the presence of the underground resource is taken into account. 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 are taken into account. The Authorities acknowledge that it will be appropriate to keep under review the extent of the area necessary to provide adequate safeguarded resources over the permitted life of the Mine and will address this through subsequent reviews of the Plan where necessary. In the meantime, the Policies Map accompanying the Plan shows the overall extent of potential potash resources within the Plan area, as well as the area currently subject to safeguarding. Prospective developers should refer to this map for information on the distribution of the overall potash resource and seek further advice from the relevant mineral planning authority if there is any doubt about how a potential development may be impacted by the potash and polyhalite safeguarding requirements included in the Plan. Types of surface development which are considered relevant for the purposes of safeguarding underground potash and polyhalite are identified in Policy S03 (part one).

- 8.30 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. The presence of a hydrocarbons well could in itself lead to a direct local sterilisation of potash and polyhalite resources, and also act as a constraint to the driving of access tunnels towards target areas of more viable resources. The long term sterilising effect of such constraints may be difficult to foresee during the early stages of mine development.
- 8.31 To ensure that consideration is given to protecting reserves and resources of potash, including polyhalite from the potential effects of sub-surface hydrocarbons development or storing gas, safeguarding is considered appropriate. The safeguarding area, identified on the Policies Map, is considered to provide for safeguarding of resources sufficient to cover the permitted life of the Woodsmith Mine and offers a reasonable balance between protection of the resource and providing flexibility for other development to take place where appropriate and consistent with other policies in the Plan, recognising that PEDLs are located within the southern part of the National Park. Whilst there are no current PEDLs in the safeguarded area, a number, including some recent PEDLs awarded during the 14th onshore licensing round, overlap with the southern part of the Woodsmith Mine permission area. The effect of national policy and other policies in the Plan, particularly Policy M16, would act as a major constraint to most forms of surface hydrocarbons development in this area. As noted in paragraph 8.27, the Authorities acknowledge that it will be appropriate to keep under review the extent of the area necessary to provide adequate safeguarding of potash, including polyhalite, resources over the permitted life of the Mine and will address this through subsequent reviews of the Plan where necessary. This will allow further consideration to be given to safeguarding issues in the event of any further PEDL rounds, or any new information on the extent and distribution of viable potash and

polyhalite resources following commencement of extraction at Woodsmith Mine which is expected to commence in the first few years following adoption of the MWJP. As with other forms of safeguarding, the purpose is not to prevent other forms of development from taking place under any circumstances, but to ensure that the presence of the safeguarded resource is taken into account, and given priority where appropriate. 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 underground conflict could arise, applicants will need to demonstrate, including through use of Interaction Agreements where appropriate, that measures can be implemented to ensure that the safeguarded resource is adequately protected.

- 8.32 Planning guidance and case law makes clear that Minerals Planning Authorities do not need to carry out their own assessments of potential impacts which are controlled by other regulatory bodies. It states that they can determine applications having considered the advice of those bodies without having to wait for the other approval processes to be concluded. The Mineral Planning Authorities will therefore carry out consultation with other appropriate regulatory bodies (such as the Environment Agency, Health and Safety Executive, Oil and Gas Authority and Mines Inspector) on planning applications which might impact on the safeguarded underground minerals resource, to ensure that the Authorities can be satisfied that sub-surface issues can and will be adequately addressed by other complementary regulatory regimes where relevant.

Waste Management Facility Safeguarding

- 8.33 National waste planning policy requires all planning authorities, including district and borough Councils in two-tier planning areas, 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.
- 8.34 As not all waste management facilities are the subject of planning permissions granted by the waste planning authority (for example they may be operating under lawful use rights or as uses permitted under the Use Classes Order), comprehensive information on the full extent of the facility network in the Plan area is not available. Also, it is likely that there will be significant changes to the network over the life of the Joint Plan. It is not therefore practicable to identify all facilities for safeguarding in the Plan.
- 8.35 However, certain facilities or sites which are considered to be particularly important should be the subject of specific safeguarding and 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 Joint Plan.

Policy S04: Waste management facility safeguarding

Waste management sites identified on the Policies Map and in Appendix 2, with a 250m buffer zone, will be safeguarded against development which would prevent or unduly restrict the use of the site for waste development, unless:

- i) The need for the alternative development outweighs the benefits of retaining the site; and**
- ii) Where the site is in active use for waste management purposes, a suitable alternative location can be provided for the displaced infrastructure; or**
- iii) The site is not in use and there is no reasonable prospect of it being used for waste management in the foreseeable future;**

iv) The site is not viable or capable of being made viable.	
Where development, other than exempt development as defined in the Safeguarding Exemption Criteria list, as set out in paragraph 8.55 is proposed within an identified buffer zone permission will be granted where adequate mitigation can, if necessary, be provided to reduce any impacts from the existing or proposed adjacent waste uses to an acceptable level, and the benefits of the proposed use outweigh any safeguarding considerations.	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Waste Industry	
Key links to other relevant policies and objectives	
<i>W02, W11, S04, S06, D01, W10</i>	<i>Objectives 2, 6, 7</i>
Monitoring: Monitoring indicator 42_(see Appendix 3)	

Policy Justification

- 8.36 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 enabling communities to take responsibility for waste arising in their area, in line with local, national and European policy and legislation.
- 8.37 As some waste uses are relatively low-value developments, they are at risk of being replaced by competing, higher-value land uses. Safeguarding facilities can help to guard against 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 for other forms of development. Where a site is not in use, viability issues will be relevant to considering whether there is a reasonable prospect of the site being used for waste management in the foreseeable future. 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.
- 8.38 In some cases, the introduction of other forms of development in close proximity to established or allocated waste uses, can lead to conflict given the potential for impacts on local amenity due, for example, to noise, dust, odour or bioaerosols. Whilst it is not possible to identify all such forms of development exhaustively, they include residential uses and also commercial and industrial uses that depend on a high quality local environment (for example within the food and health care sectors). The identification of a buffer zone around safeguarded waste facilities ensures that the potential for such impacts can be properly taken into account, whilst also recognising the importance of allowing the waste facility to continue to operate. As a range of types and scales of development could be associated with waste management activity, it is not practicable to define individual buffer zones for each facility. A 250m buffer zone reflects a balance between ensuring that the potential for significant impacts arising from some waste uses is allowed for, whilst limiting the extent to which consultation for safeguarding purposes is required. It is also consistent with the Environment Agency's restrictions on open composting of waste taking place within 250m of residential property. 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 or there are other overriding benefits.. In these circumstances the Minerals and Waste Planning Authority will seek to work

constructively with the relevant local planning authority and developers to ensure that a proportionate approach to implementing safeguarding of minerals and waste infrastructure requirements is taken.

- 8.39 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. Consultation with the County Planning authority will be required on any non-exempt development on a safeguarded waste site, or accompanying buffer zone before any decision can be made on the application. Exempt development is identified later in this Chapter in para. 8.55.

Minerals and Waste Transport Infrastructure Safeguarding

- 8.40 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 S05: Transport infrastructure safeguarding

Railheads, rail links and wharves identified on the Policies Map and in Appendix 2, with a 100m buffer zone, will be safeguarded against development which would prevent or unduly restrict the use of the infrastructure for minerals or waste transport purposes, unless:

- i) The need for the alternative development outweighs the benefits of retaining the facility; and
- ii) Where the minerals or waste transport infrastructure is in active use on the land, a suitable alternative location can be provided for the displaced infrastructure; or
- iii) The infrastructure is not in use and there is no reasonable prospect of it being used for minerals or waste transport in the foreseeable future;
- iv) The site is not viable or capable of being made viable.

Where development, other than exempt development as defined in the Safeguarding Exemption Criteria list, as set out in paragraph 8.55 is proposed within an identified buffer zone permission will be granted where adequate mitigation can, if necessary, be provided to reduce any impacts from the existing or proposed adjacent minerals or waste transport infrastructure uses to an acceptable level, and the benefits of the proposed use outweigh any safeguarding considerations.

Main responsibility for implementation of policy: NYCC, CYC and NYMNPA and District and Borough Councils

Key links to other relevant policies and objectives

101, S01, S03, S06, D01,

Objectives 3, 7, 8

Monitoring: Monitoring indicator 43 (see Appendix 3)

Policy Justification

- 8.41 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 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 and the rail link at Kellingley Colliery, which has now closed, which have previously played a role in the transport of minerals, and where future potential may still exist. It is recognised that rail transport infrastructure at former mine sites in the Plan area are important for their potential to serve other existing or proposed rail-linked uses. It is not the intention in safeguarding them for minerals and waste transport to prevent other such beneficial uses from taking place but to ensure that their potential significance in providing opportunities for modal shift in transport of minerals and waste is taken into account in other development decisions. In these circumstances the Minerals and Waste Planning Authority will seek to work constructively with the relevant local planning authority and developers to ensure that a proportionate approach to implementing safeguarding of minerals and waste infrastructure requirements is taken.

- 8.42 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 wharfs and railheads⁴². The East Coast marine Plan (Policy PS3) supports the protection and expansion of port and harbour capacity. Where a site is not in use, viability issues will be relevant to considering whether there is a reasonable prospect of the site being used for minerals or waste transport in the foreseeable future.
- 8.43 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. A 100m buffer zone is considered to be adequate to ensure that the potential for significant impacts is taken into account for these forms of development. 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 or there are other overriding benefits.
- 8.44 In those parts of the 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 in paragraph 8.55.

Minerals Ancillary Infrastructure Safeguarding

- 8.45 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.

⁴² As referred to in the Yorkshire and Humber Marine Aggregate Study 2014

Policy S06: Minerals ancillary infrastructure safeguarding

Minerals ancillary infrastructure sites identified on the Policies Map and in Appendix 2, with a 100m buffer zone, will be safeguarded against development which would prevent or unduly restrict the use of the site for minerals ancillary infrastructure purposes, unless:

- i) The need for the alternative development outweighs the benefits of retaining the site; and
- ii) Where minerals ancillary infrastructure is in active use on the land, a suitable alternative location can be provided for the displaced infrastructure; or
- iii) The site is not in use and there is no reasonable prospect of it being used for minerals ancillary infrastructure in the foreseeable future;
- iv) The site is not viable or capable of being made viable.

Where development, other than exempt development as defined in the Safeguarding Exemption Criteria list, as set out in paragraph 8.55 is proposed within an identified buffer zone permission will be granted where adequate mitigation can, if necessary, be provided to reduce any impacts from the existing or proposed adjacent minerals ancillary infrastructure uses to an acceptable level, and the benefits of the proposed use outweigh any safeguarding considerations.

Main responsibility for implementation of policy: NYCC, CYC and NYMNP and District and Borough Councils

Key links to other relevant policies and objectives

I02, D01, S03, S06

Objectives 3, 6, 7

Monitoring: Monitoring indicator 44 (see Appendix 3)

Policy Justification

- 8.46 In many cases, ancillary infrastructure is located at the site where the minerals that they wholly or partly depend upon are produced. In these circumstances they are protected from being replaced 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.
- 8.47 In other cases, ancillary minerals infrastructure is located at free-standing sites which do not 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.
- 8.48 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 Joint 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 why it is no longer appropriate for safeguarding, in line with the criteria in the policy.
- 8.49 To protect safeguarded facilities from encroachment by other non-compatible development which may compromise the continued use of the site minerals ancillary infrastructure, for example development which may be sensitive to disturbance from noise or dust, a buffer zone around safeguarded facilities has also been identified. A 100m buffer zone is considered to be adequate to ensure that the potential for significant impacts is taken into account for these forms of development. 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 or there are other overriding benefits. Where a safeguarded site is not in use, viability issues will be relevant in considering whether there is a reasonable prospect of the site being used for minerals ancillary infrastructure in the foreseeable future.

- 8.50 In those parts of the Plan area covered by both County and District 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

Consultation Areas

- 8.51 The following policy addresses the consultation process between the District and Borough Councils and the County Council within that part of the Plan area falling within NYCC, where development within the jurisdiction of the District or Borough is proposed in safeguarding areas identified in the Joint Plan. This consultation process does not apply to all forms of development dealt with by District and Borough Councils. A list of forms of development which are exempt from the process is provided later in this Chapter in paragraph 8.55.

Policy S07: Consideration of applications in Consultation Areas

Where development, other than exempt development as defined in the Safeguarding Exemption Criteria list, as set out in paragraph 8.55, 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, NYMNP, 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

- 8.52 This policy only applies in those parts of the 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.
- 8.53 As well as safeguarding minerals resources, the Joint Plan safeguards 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 in para. 8.55 below. As with minerals resource safeguarding, the purpose of consultation is to help to ensure the implementation of the safeguarding policy requirements in those parts of the Plan area where there is a 'two-tier' planning structure.

- 8.54 It is intended that consultation areas will be updated when the Joint Plan is reviewed, in order to ensure that it reflects the distribution of any new resources, sites or infrastructure that may be identified.

Safeguarding Exemption Criteria

- 8.55 The following application types will be regarded as 'exempt' development and, where proposed within an area safeguarded in the 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 an otherwise built up frontage within a settlement
- 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, waste and minerals and waste transport infrastructure safeguarding requirements, or, in the case of emerging local plan allocations, where the Minerals and Waste Planning Authority has raised no safeguarding concerns during consultation on the emerging plan allocation.
- 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
- Redevelopment of previously developed land not increasing the footprint of the former development
- Certificates of Lawfulness of Existing Use of Development and
- Certificates of Lawfulness of Proposed Use or Development.

Sites proposed for safeguarding

- 8.56 Policies S04, S05 and S06 deal with the safeguarding of individual waste sites, transport infrastructure, (rail and wharves), and stand-alone minerals ancillary infrastructure. The aim of safeguarding the sites is 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.
- 8.57 Location details and plans of the sites which are safeguarded under these policies are included in Appendix 2. The individual plans in the appendix do not include the buffer zones referred to in the policies, but the relevant buffer zone for each site is shown on the Policies Map, which can be viewed at www.northyorks.gov.uk/mwjointplan .

Chapter 9: Development Management

9.1 The following sections deal with a range of issues relevant to consideration of planning applications for minerals or waste development in the 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 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 Authority will grant permission unless:

- **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 policies relating to 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 Policy D04 of this Joint Plan.**

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

Key links to other relevant policies and objectives

D02, D04

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 does not apply where specific policies in the NPPF indicate that development should be restricted. A footnote indicates that this includes National Parks and AONBs, as well as certain other designations⁴³. The fact that around a

⁴³ These include sites protected under the Birds and Habitats Directives, Sites of Special Scientific Interest, Green Belt, Local Green Space, Heritage Coast

third of the Plan area is within either the North York Moors National Park or one of the AONBs makes it 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 will need to be applied in the context of this clear policy. As there is potential for minerals and waste development to constitute major development, it is considered appropriate to refer to this in the Policy.

Development Management Criteria

- 9.5 Planning law requires that planning applications be determined in accordance with the development plan unless material considerations indicate otherwise. The NPPF states that local plans should contain development management policies for minerals development.
- 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 specific considerations relating to particular types of minerals and waste development and related infrastructure addressed in the preceding Chapters. These include matters such as the 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 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 operate alongside any other policies in the Joint Plan that are contained in the preceding Chapters.

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 the amenity of local communities (including residents, visitors and local businesses operating in those communities). A key role for the Joint 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

- 1) 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 impacts on the**

<p>amenity of local communities and residents, local businesses and users of the public rights of way network and public open space including as a result of:</p> <ul style="list-style-type: none"> • noise, • dust, • vibration, • odour, • emissions to air, land or water • visual intrusion, • site lighting • vermin, birds and litter • subsidence and land instability • public health and safety • disruption to the public rights of way network • the effect of the development on opportunities for enjoyment and understanding of the special qualities of the National Park • cumulative effects arising from one or more of the above at a single site and/or as a result of a number of sites operating in the locality <p>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.</p> <p>2) 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.</p>	
<p>Main responsibility for implementation of policy: NYCC, CYC and NYMNP and Minerals and Waste industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p><i>Strategic policies in Chapter 5, 6 and 7, D02, D03, D06, D07, D08, D09, D10, D11</i></p>	<p><i>Objectives 9, 10, 12</i></p>
<p>Monitoring: Monitoring indicator 47 (see Appendix 3)</p>	

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 and screening bunds, screen planting, dust suppression systems and sensitive placement of site lighting. 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. Minerals development, which often takes place in rural areas, can involve the extensive development of land and in some instances can impact directly or indirectly on the public rights of way network or use of public open space. Proposals should, where relevant, provide for the protection of the rights of way network and the amenity of users of the network and open space including, where necessary, through the provision of suitable temporary or permanent alternatives. 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. Where it is not practicable to avoid an unacceptable level of impact, permission for new development will need to be refused. The requirements of this Policy apply

alongside any more specific local amenity considerations identified in the minerals and waste specific policies in Chapters 5 and 6. Impacts on local amenity as a result of minerals and waste transport are addressed in Policy D03. Other policies in this Chapter deal with a range of impacts on matters such as the historic environment and landscape and will be applied, where relevant, when proposals are being considered.

- 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, with the objective of establishing a high standard of protection.
- 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 to 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. Examples include the issuing of environmental permits for waste operations and crushing plant, and the control of statutory noise nuisance. The Authorities will liaise with other agencies including the Environment Agency and, where applicable, District Council Environmental Health Departments, on such matters. However, certain pollution control matters can also be relevant when determining minerals and waste planning applications, particularly where they are relevant to the use and development of land for example, those impacting on public health. Applicants are advised to have early discussions with the Minerals and Waste Planning Authority other relevant regulatory authorities to ensure a coordinated approach. With regard to development that is required by The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 to be accompanied by an environmental statement, a developer needs to include in the statement a description of the likely significant effects of the development resulting from, inter alia, the risk to human health. In determining such applications consideration will be given, where appropriate to the case, as to whether specific monitoring measures may be required, as part of a decision granting planning permission, by means of a planning condition or planning obligation (as applicable), to monitor identified significant adverse effects on the environment arising from proposed EIA development (which may include health effects if applicable).

Transport of minerals and waste and associated traffic impacts

- 9.14 The provision and safeguarding of transport infrastructure, to encourage a shift away from road transport towards greater use of alternative forms of transport, has been considered earlier in the Joint 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

1) Where practicable minerals and waste movements should utilise alternatives to road transport including rail, water, pipeline or conveyor.

Where road transport is necessary, proposals will be permitted where:

- **There is capacity within the existing network for the level of traffic proposed and the nature, volume and routing of traffic generated by the development would not have an unacceptable impact on local communities, businesses or other users of the highways network, or any such impacts can be appropriately mitigated, for example by traffic controls, highway improvements and traffic routing arrangements; 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, including the needs of non-motorised users, where relevant; and**
- **There are suitable arrangements in place for on-site manoeuvring, parking and loading/unloading.**

Where access infrastructure improvements are needed to ensure that the requirements above can be compiled with, information on the nature, timing and delivery of these should be included within the proposals.

2) 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

<i>Strategic policies in Chapters 5, 6 and 7 and Policies D03, D06, D07, D08</i>	<i>Objectives 6, 7, 8, 11</i>
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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 Plan area, sources of supply and demand for minerals are relatively dispersed, as are locations of waste arisings and management. Furthermore, use of alternative modes of transport may not always represent a more sustainable option, depending on the circumstances in any individual case. 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. Air quality can also be adversely affected, particularly in locations where Air Quality Management Areas have been identified

and other development management policies in the Joint Plan will therefore also be relevant in some circumstances.

- 9.17 It will be important for any proposals involving additional traffic generation to address potential impacts and for adequate control measures to be applied if necessary. Where additional movements are likely to be significant, applications should be accompanied by a transport assessment including a green travel plan. The purpose of these assessments is to help to give full consideration to measures that will ensure that 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 green travel plan is likely to be required in support of a particular proposal.

Protection of Important Assets

National Parks and AONBs

- 9.18 National Parks are designated under the National Parks and Access to the Countryside Act 1949. 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 outdoor recreation, enjoying impressive views and experiencing peace and tranquillity.
- 9.19 The statutory purposes of National Parks, as set out in the Environment Act 1995 are:
- To 'conserve and enhance the natural beauty, wildlife and cultural heritage of the Park'; and
 - To '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 National Park Authority Core Strategy and Development Policies document, which provides the overarching planning policy for the National Park, is framed around delivering these National Park purposes and achieving sustainable development within that context. The North York Moors National Park Management Plan sets out the long-term vision for the National Park and promoting the special qualities of the National Park.
- 9.21 Areas of Outstanding Natural Beauty are also established under the National Parks and Access to the Countryside Act 1949 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 and level of protection 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 the North Pennines AONB, characterised by extensive and remote high moorland and upland dales, are within the Plan area. The primary purpose of ANOB

designation is to conserve and enhance natural beauty. In pursuing the primary purpose of designation, account should be taken of the needs of agriculture, forestry and other rural industries and of the economic and social needs to communities. Particular regard should be paid to promoting sustainable forms of social and economic development that in themselves conserve and enhance the environment. Recreation is not an objective of designation, but the demand for recreation should be met so far as it is consistent with the conservation of natural beauty and the needs of agriculture, forestry and other uses.

- 9.22 Around a third of the 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 also 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 outside World Heritage sites, Scheduled Monuments and Conservation Areas) and this is considered earlier in the Joint Plan in Chapter 5 .

Policy D04: Development affecting the North York Moors National Park and the AONBs

Part 1) – Major minerals and waste development

Proposals for major development in the National Park, Howardian Hills, Nidderdale, North Pennines and Forest of Bowland Areas of Outstanding Natural Beauty should 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:

- a) The need for the development, which can include a national need for the mineral or the waste facility and the contribution of the development to the national economy; and**
- b) The impact of permitting it, or refusing, it upon the local economy which includes that of the National Park or AONB; and**
- c) Whether, in terms of cost and scope the development can viably and technically be located elsewhere outside the designated area, or the need for it can be met in some other way; and**
- d) The extent to which any detrimental effect on the environment, the landscape and recreational opportunities, can be moderated.**

Where there are exceptional circumstances and the proposal is considered to be in the public interest, every effort to avoid adverse effects will be required. Particular consideration will be given to the extent to which the proposal may affect the qualities which contributed to the designation of the landscape. Where adverse effects cannot be avoided, harm should be minimised through appropriate mitigation measures. Appropriate and practicable compensation will be required for any unavoidable effects which cannot be mitigated.

Part 2) – All other 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 Joint Plan.

Part 3) – Proposals which impact the setting of Designated Areas	
Proposals for development outside of the National Parks and AONBs will not usually be permitted where it would have an unacceptable 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	
<i>M01, D01, D06, D07, D08, D11</i>	<i>Objectives 6, 9, 10</i>
Monitoring: Monitoring indicator 49 (see Appendix 3)	

Policy Justification

- 9.23 The NPPF states that great weight should be given to conserving the 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.
- 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 and AONBs 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 (Development Management Procedure) (England) Order 2015. For this reason, Policy D04 seeks to give further local guidance on the approach to be taken to this issue.
- 9.25 For major development in the National Park and AONBs, the four 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, where relating to proposals for minerals extraction, should be the need for the resource itself, including at a national level, and whether there are alternative sources available to meet any national need. The potential for a specific mineral to be extracted on a national basis only from within the National Park or AONB will be a relevant consideration when assessing 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 Joint Plan and the NPPF. Applicants will be expected to supply sufficient information to demonstrate robustly that proposals fulfil the requirements of the major development test. Proposals should be designed to avoid adverse impacts (including cumulative impacts) on the special qualities of the National Park, though because of the inherent nature and scale of major development it is unlikely that impacts can be moderated to a level where significant adverse effects can be completely avoided. A proposal that is likely to harm a National Park or AONB to the extent that it compromises the reason for its designation is unlikely to be regarded as being in the public interest. The North York Moors has an existing potash mine and a second mine is under construction which in terms of volume of production is stated to become the largest potash mine in the world. Other significant major developments have also been located in the National Park such as RAF Fylingdales and there is growing pressure on the southern part of the Park from the hydrocarbons industry. Cumulatively it is considered that the impact of these large scale developments of an industrial nature are starting to impact on the special qualities of the National Park, particularly in terms of far reaching open moorland views, remoteness and a sense of wildness and tranquillity which were important reasons for its designation.

- 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 public bodies, not just National Park Authorities. Planning guidance states that this duty is relevant when considering development proposals situated outside National Parks or Area of Outstanding Natural Beauty boundaries, but which might have an impact on 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 the 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 the potential for any impact on the setting of this National Park as a result of proposals in the Plan area.

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 1) - Minerals

Proposals for minerals development within the York and West Yorkshire Green Belts will be supported where it would be consistent with the purposes of Green Belt identified in national policy and the openness of the Green Belt and, where the proposed development is located within the York Green Belt, it would preserve the historic character and setting of York. Where minerals extraction in the Green Belt is permitted, reclamation and afteruse will be required to be compatible with Green Belt objectives.

Part 2) - Waste

Proposals for waste development that include the construction of new buildings in the Green Belt will be considered inappropriate.

Substantial weight will be given to any harm to the Green Belt and very special circumstances, will need to be demonstrated by the applicant, in order to outweigh harm caused by inappropriateness, and any other harm.

Proposals for other forms of waste development which would result in an adverse impact on the openness of the Green Belt or on the purposes of including land within the Green Belt, including those elements which contribute to the historic character and setting of York, will only be permitted in very special circumstances, which must be demonstrated by the applicant, in which the harm is clearly outweighed by other considerations.

The following forms of waste development may be permitted in the Green Belt provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land in the Green Belt, including those elements which contribute to the historic character and setting of York:

- i) open windrow composting;
- ii) individual farm-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 M16, M17, W03, W04, D10

Objectives 9, 12

Monitoring: Monitoring indicator 50 (see Appendix 3)

Policy Justification

9.29 There are significant areas of Green Belt in the 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. The City of York Green Belt is different to the West Yorkshire Green Belt in that it is one of only six Green Belts in England whose primary purpose is to safeguard the character and setting of a historic city. Although the York Green Belt performs some of the other Green Belt functions to some extent, these are not as important as its primary purpose.

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 include:

- 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 the purposes of the relevant 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 hydrocarbons, including unconventional gas resources in the Green Belt, owing to the particular characteristics of, and potential impacts associated with, this form of development. These can include the need for tall structures associated with drilling and related appraisal activity and, potentially, the need for multiple well pads to access the resource. In all cases appropriate design and mitigation measures should be incorporated, where necessary and it will also be necessary to ensure that any proposed reclamation and afteruse is compatible with Green Belt objectives.
- 9.32 In this regard, it should be noted that mineral workings subject to a restoration condition are specifically excluded from the definition of Previously Developed Land in the NPPF (Annex 2) and therefore do not benefit from any additional flexibility afforded to previously developed land in the Green Belt, in terms of any further uses that may be acceptable. The primary aim of the restoration and aftercare of sites in the Green Belt should be to ensure that the site remains in an undeveloped state and returned to the condition and use that existed prior to minerals development or other use compatible with Green Belt objectives.
- 9.33 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, including the need to promote community responsibility in the management of waste and to reduce travel. As a result there can be benefits in 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, to help to reduce the need for transport. There can also be benefits in using established infrastructure effectively. As Green Belt is designated in association with larger urban areas there can be some conflict between identifying suitable locations for waste facilities, and protection of the Green Belt.
- 9.34 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. This suggests that some forms of waste development might be permissible in the Green Belt, in the circumstances of a particular case.
- 9.35 In order to provide local guidance on this matter, the policy identifies a number of types of waste management activities and types of locations where waste development may be permitted, provided that openness is maintained and the development would be consistent with the purposes for which the land is included in the Green Belt.
- 9.36 The Harewood Whin (WJP11) site in the City of York is a well-established waste facility in the general extent of York's 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 York and 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.

- 9.37 The North Selby Mine (WJP02) site is also allocated within the general extent of York's Green Belt. This site holds an unimplemented permission for a substantial anaerobic digestion facility, which was approved as it was considered compatible with the site's continued location within the Green Belt.
- 9.38 Land to the west of Newlands Lane (WJP05) is also allocated within the Green Belt as a site for waste disposal to support the restoration of the site following the extraction of engineering clay. A number of other established waste management sites are also located in the West Yorkshire Green Belt within Selby District.
- 9.39 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 design of the development and that mitigation measures are incorporated where necessary.

Landscape

- 9.40 The Plan area has a rich and 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

- 1) All landscapes will be protected from the harmful effects of development. Proposals will be permitted where it can be demonstrated that there will be no unacceptable impact on the quality and/or character of the landscape, having taken into account any proposed mitigation measures.
- 2) For proposals which may impact on nationally designated areas including the National Park, AONBs, and the adjacent Yorkshire Dales National Park, a very high level of protection to landscape will be required. Development which would have an unacceptable landscape impact on these areas will not be permitted.
- 3) Protection will also be afforded to the historic character and setting of York and to areas defined as Heritage Coast. Permission will only be granted where it would not lead to an unacceptable impact on the historic character or setting of York or on the undeveloped character of Heritage Coast, unless the need for, or benefits of, the development outweigh the harm caused.
- 3) 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

Strategic policies in Chapters 5, 6, and 7

Objectives 9, 12

Monitoring: Monitoring indicator 51 (see Appendix 3)

Policy Justification

- 9.41 The variety of landscapes in the area adds much to its overall distinctiveness. A large part of the area is designated or defined 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 significance⁴⁴. Unlike National Parks and AONBs, Heritage Coast is not classed as a nationally designated landscape. Its definition is non-statutory, and can only be made with the agreement of local authorities and landowners, and agreed by Natural England. The North Yorkshire and Cleveland Heritage Coast falls mainly within the Plan area, with approximately 70% of the defined area falling within the North York Moors National Park. However, the southern and northern parts do not benefit from protection via National Park designation. A small part of the Flamborough Head Heritage Coast also falls within the Plan area. The NPPF (para 114) requires local planning authorities to ‘maintain the character of the undeveloped coast, protecting and enhancing its distinctive landscapes, particularly in areas defined as Heritage Coast, and improve public access and enjoyment of the coast’. Such areas are therefore afforded a relatively high level of significance in national policy terms. Maintaining the setting of the historic City of York is also an important landscape consideration as it is not the 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 structures⁴⁵ 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.
- 9.42 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. In some parts of the Plan area, areas of locally important landscapes have been identified in other local plans. Where these continue to form part of the statutory development plan, and are relevant to a proposal which fails to be determined by the relevant minerals and waste planning authority, regard will be had to the requirements of any associated local plan policy.
- 9.43 There are a number of Landscape Character Assessments (LCAs) covering the Plan area, including those produced by District and Borough councils, which provide a useful source of information relating to the various landscapes 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. Within the National Park and AONBs relevant information may also be available in their respective Management Plans. Applicants should use any

⁴⁴ 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 Plan area. Areas currently so designated can be viewed at <https://www.gov.uk/tax-relief-for-national-heritage-assets>.

⁴⁵ Further information can be found in the City of York Council Heritage Topic Paper update 2013

available local landscape studies and other relevant information to assist in identifying any potential landscape impacts and mitigation.

- 9.44 In particular, such studies can assist in gaining a wider understanding of the significance of a location or settlement in landscape terms, and how a development proposal may impact not just on the immediate site but on any wider area it may influence. Careful consideration should therefore be given to the wider landscape setting and context of the site, both designated and undesignated, 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.
- 9.45 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, as this can lead to a more integrated approach when considering 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-application research and discussion with relevant organisations. More information on the study can be found in the summary report <https://www.northyorks.gov.uk>
- 9.46 An important aspect of the environment of the Plan area, of relevance when considering landscape impact, 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 definitive way, the potential for a development proposal to impact adversely on tranquillity 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.
- 9.47 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.
- 9.48 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.

Biodiversity and geodiversity

- 9.49 The NPPF requires protection and enhancement of biodiversity by ‘minimising impacts and providing net gains 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

- 1) **Proposals will be permitted where it can be demonstrated that, having taken into account any proposed mitigation measures, there will be no unacceptable impacts on biodiversity or geodiversity. The level of protection provided to international, national and locally designated sites are outlined in parts 2) to 8) below.**
- 2) **A very high level of protection will be afforded to sites designated at an international level, including SPAs, SACs and RAMSAR sites. Development which would have an unacceptable impact on these sites will not be permitted.**
- 3) **Development, whether inside or outside of a SSSI which is likely to have an adverse effect on the notified special interest features of a SSSI or a broader impact on the national network of SSSIs will only be permitted where the benefits of the development at that location clearly outweigh the impact to the SSSI features and the broader SSSI network. The loss or deterioration of irreplaceable habitats including ancient woodland or aged or veteran trees, will only be permitted where both the need for, and the benefits of the development at the proposed location clearly outweigh the impact or loss.**
- 4) **Where development would be located within an Impact Risk Zone defined by Natural England for a SPA, SAC, RAMSAR site or SSSI, or at any other location at which it could have an adverse impact on the SPA, SAC, RAMSAR site or SSSI, and the development is of a type identified by Natural England as one which could potentially have an adverse impact on the designated site, proposals should be accompanied by a detailed assessment of the potential impacts and include proposals for mitigation and enhancement where relevant.**
- 5) **Locally important sites and assets include:**
 - i. **Sites of Importance for Nature Conservation (including candidate sites);**
 - ii. **Local Nature Reserves;**
 - iii. **Local Geological Sites; and**
 - iv. **Habitats and species of principal importance or other sites of geological or geomorphological importance.**

Development will not be permitted that will result in an unacceptable impact to locally important sites and assets unless it can be demonstrated that:

- **the benefits of development clearly outweigh the nature conservation value or scientific interest of the site and its contribution to wider biodiversity objectives and connectivity; and**
- **the proposed mitigation or compensatory measures are equivalent to the value of the site/asset.**

<p>6) Through the design of schemes, including any proposed mitigation and or compensation 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 and supporting the development of resilient ecological networks.</p> <p>7) 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 on a site by site basis and as a last resort in accordance with the mitigation hierarchy. These circumstances specifically include where:</p> <ul style="list-style-type: none"> i) It has been demonstrated that it is not possible to fully 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 and the benefits of the development in the proposed location outweigh 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, unless otherwise agreed by the planning authority. Compensatory gains outside of the planning authority area will only be deemed as acceptable where it is clearly demonstrable that the approach will lead to greater biodiversity and/or geodiversity benefits than alternative options within the planning authority area. <p>8) Proposals must consider the cumulative impacts as a result of a combination of individual impacts from the same development and/or through combinations of impacts in conjunction with other development. Proposals will only be permitted where it would not give rise to unacceptable cumulative impacts.</p>	
<p>Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry, District and Borough Councils Local Nature Partnerships, Local Geodiversity Partnerships.</p>	
<p>Key links to other relevant policies and objectives</p>	
<p><i>Strategic Policies in Chapters 5, 6, and 7, D02, D04, D05, D08, D09, D10, D12</i></p>	<p><i>Objectives 9, 11, 12</i></p>
<p>Monitoring: Monitoring indicator 52 (see Appendix 3)</p>	

Policy Justification

- 9.50 The biological and geological diversity of the Plan area is an integral part of its natural environment. A large proportion of the Plan area's natural environment is designated or protected at 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 protected. In addition to the protection afforded directly to important designated sites, Natural England have identified Impact Risk Zones as a GIS tool to allow initial assessment of the potential risks posed by development proposals to SSSIs, SACs, SPAs and Ramsar sites. These define zones around each designated site which reflect the particular sensitivities of the features for which

it is notified and indicate the types of development proposals, which in some cases include applications for oil and gas exploration and extraction, quarrying, waste development and composting, which could potentially have adverse impacts. Applicants for relevant forms of development which would be located in an Impact Risk Zone will need to ensure that potential impacts are carefully assessed and, if necessary, are accompanied by proposals for mitigation. More information on the location of Impact Risk Zones can be found via data.gov.uk/dataset/sssi-impact-risk-zones.

- 9.51 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 maintain and enhance. Biodiversity and geodiversity assets also form an important element of the green infrastructure⁴⁶ of the area and contribute to overall quality of life.
- 9.52 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.
- 9.53 Applicants will need to demonstrate, when bringing forward proposals, that any potential impacts on biodiversity and geodiversity have been identified and addressed through avoidance or mitigation where necessary. Opportunities should also be sought to deliver longer term enhancement, including through contributing to the development of enhanced ecological networks to improve resilience and help to mitigate effects of climate change. 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.
- 9.54 In some cases, it may be possible to deliver greater overall benefits through delivering 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 arise 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 to ensure that a coordinated approach, and maximum overall benefits, taking into account existing permitted schemes and other relevant proposals, can be achieved where practicable.
- 9.55 In some limited circumstances it 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

⁴⁶ 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.

necessary, to be delivered at the development site rather than through offsetting at an alternative location.

- 9.56 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 ensure that biodiversity assets are not displaced out of the local area. Offsetting proposals may only be permitted outside of the plan area with written agreement from the planning authority, and only where sufficient evidence could be provided to demonstrate the biodiversity/geodiversity benefits of undertaking offsetting outside of the Plan area. For example, if a site was on the plan area boundary and sufficient evidence could be provided to demonstrate the biodiversity benefits of undertaking an offset outside of the Plan 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, to ensure an appropriate overall level of gain in the interests of sustainability. In practice it is considered that circumstances necessitating offsetting in the Plan area are likely to be very rare. The need to maintain a policy on offsetting will be kept under review in the light of any further national policy or guidance.

Historic environment

- 9.57 'Heritage assets' are buildings, monuments, places, areas or landscapes identified as having a degree of significance meriting consideration in planning decisions. They include both designated and non-designated assets 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. For all assets, the desirability of sustaining and enhancing significance should be taken into account.
- 9.58 The setting of a heritage asset is also an important consideration. The NPPF defines the setting as '*The surroundings in which a heritage asset 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*'.
- 9.59 The Plan area contains tens of thousands of designated and undesignated heritage assets including Listed Buildings, Scheduled Monuments, a World Heritage Site, Registered Parks and Gardens, Registered Battlefields and Conservation Areas and assets which are not yet identified or designated.
- 9.60 Surface 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 surface and underground minerals and waste development can lead to other direct and indirect impacts, including on the setting of heritage assets, which can be important in contributing to their overall significance.

Policy D08: Historic environment

- 1) 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.**

2) 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 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.

3) Proposals that would result in less than substantial harm to the significance of a designated heritage asset (or an undesignated archaeological site of national importance) will be permitted only where this is outweighed by the public benefits of the proposal. Where proposals would lead to substantial harm to or total loss of the significance of a designated heritage asset (or an undesignated archaeological site of national importance), planning permission will be refused unless it can be shown that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh the harm or loss, or all of the following apply:

- i) The nature of the heritage asset prevents all reasonable uses of the site;
- and
- ii) No viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
 - iii) Conservation by grant funding or some form of charitable or public ownership is demonstrably not possible; and
 - iv) The harm or loss is outweighed by the benefit of bringing the site back into use.

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 and subsequent analysis, publication and archive deposition 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

Strategic Policies in Chapters 5, 6 and 7 and Policy D10

Objective 9

Monitoring: Monitoring indicator 53 (see Appendix 3)

Policy Justification

9.61 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 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 identified in the Harrogate Borough Council Plan and is also shown on the Policies Map for the Joint Plan. Regard will be had to the purposes of the buffer zone when considering proposals which may impact on the WHS.

- 9.62 Evidence produced by City of York Council in 2013⁴⁷ identifies six principal defining characteristics which are strategically important to the historic character and setting of York, that set York apart from other similar cities in England. These characteristics are:
- The City's strong urban form, townscape, layout of streets and squares, building plots, alleyways, arterial routes, and parks and gardens;
 - The City's compactness;
 - The City's landmark monuments, in particular the City Walls and Bars, the Minster, churches, guildhalls, Clifford's Tower, the main railway station and other structures associated and chocolate manufacturing heritage;
 - The City's architectural character, this rich diversity of age and construction displays variety and order and is accompanied by a wealth of detail in windows and door openings; bay rhythms; chimneys and roofscapes; brick; stone; timber; ranges; gables; ironwork; passageways; and rear yards and gardens;
 - The City's archaeological complexity: the extensive and internationally important archaeological deposits beneath the City;
 - The City's landscape and setting within its rural hinterland and the open green strays and river corridors and Ings, which penetrate into the heart of the urban area, breaking up the City's built form.
- 9.63 York 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 important because of the significance of the City to the tourism and wider economy of the Plan area, with the City receiving around 7 million visitors annually. The City as a whole is not the 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.
- 9.64 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.
- 9.65 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 points to the existence of significant heritage assets, 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.

⁴⁷ City of York Council Heritage Topic Paper update 2013

- 9.66 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.
- 9.67 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 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.
- 9.68 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. National policy provides a high degree of protection to designated heritage assets, or archaeological sites of national importance, that are at risk of substantial harm to, or total loss of, significance. In cases where the partial or total loss of the significance of heritage assets is accepted as being consistent with the criteria in the Policy, leading to the grant of planning permission for the development, 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.

Water Environment

- 9.69 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 water pollution. A further important consideration is the EU Water Framework Directive (WFD), which sets out a range of obligations to which planning authorities should have regard when exercising their planning functions. The Directive (2000/60/EC) introduced a comprehensive river basin management planning system to protect and improve the ecological health of rivers, lakes, estuaries and coastal and groundwaters. This is underpinned by the use of environmental standards to assess risks to the ecological quality of the water environment and to identify the scale of improvements that would be needed to bring waters under pressure back into good condition.

Policy D09: Water environment

- 1) **Proposals for minerals and waste development will be permitted where it can be demonstrated that no unacceptable impacts will arise, taking into account any proposed mitigation, on surface or groundwater quality and/or surface or groundwater supplies and flows.**
- 2) **In relation to surface and groundwater quality and flows, a very high level of protection will be applied to principal aquifers and groundwater Source Protection Zones. Development which would lead to an unacceptable risk of pollution, or harmful disturbance to groundwater flow, will not be permitted.**
- 3) **Permission for minerals and waste development on sites not allocated in the Joint 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, all sources of flooding (i.e. surface and groundwater flooding and flooding from rivers and coastal waters) will not be permitted.**
- 4) **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 drainage systems.**

Key links to other relevant policies and objectives

Strategic Policies in Chapters 5, 6 and 7 and Policies D07, D10, D11

Objectives 9, 10, 11

Monitoring: Monitoring indicator 54 (see Appendix 3)

Policy Justification

- 9.70 Large parts of the 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 Joint Plan. Flood risk maps are available on the Environment Agency’s website. There are also substantial areas which are underlain by principal 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 to protect public drinking water supplies and certain supplies used for commercial purposes. In some cases, commercial users of water in the Plan area, such as the brewing industry, are reliant on the availability of water with particular qualities, for example in terms of its chemical and minerals balance. Where development is proposed which has the potential to impact on such sources of supply then this will be a relevant consideration under the Policy, in order to ensure an appropriate degree of protection. Some aspects of the natural environment are also dependent on water of a particular quality being available. The potential for impact on any such receptors will also be a matter to be taken into account where relevant under the terms of this Policy.
- 9.71 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 relevant to minerals and waste development, including those relating to conventional and unconventional oil and gas, landfill, non-landfill waste activities and mining, quarrying and gravel extraction. To 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 will also be given to the aims and objectives of the Water Framework Directive. Under the WFD, developers and planning authorities should take all measures necessary to ensure that no deterioration of any water bodies including non-main rivers, lakes and groundwater is caused by a development. Development that cannot provide appropriate mitigation to prevent deterioration of surface water or groundwater bodies would be contrary to the objectives of the WFD and should not be permitted. In order to comply with obligations under the WFD, development proposals should seek to improve the water body status of any waters that could be affected by the development. Supporting the achievement of water status objectives outlined in River Basin Management Plans is important in meeting obligations under the WFD but is not necessarily, in itself, sufficient to demonstrate compliance with WFD objectives. A range of other regulatory regimes may also be relevant depending on the circumstances.

- 9.72 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 Joint Plan, to ensure that decisions made on 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.
- 9.73 Full details of the tests can be found in the national Planning Practice Guidance dealing with flood risk. Applicants are advised to consider the Guidance and national policy on flood risk at an early stage in developing proposals.
- 9.74 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 national Planning Practice Guidance. 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.
- 9.75 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 Joint Plan, 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 Joint 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 managing 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.

- 9.76 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 accordance with the PPG. The Environment Agency published updated guidance in February 2016⁴⁸ on when and how to make allowances for climate change in flood risk assessments and this should be used as a source of information when assessing proposals in relation to flood risk. 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.
- 9.77 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.

Reclamation and afteruse of minerals and waste sites

- 9.78 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 considerations of reclamation and afteruse, although in some cases, such as those involving landfill and proposals for temporary plant and buildings, such issues can arise. Whilst the main focus of this section is on minerals development, the policy it contains is also intended to be applied to relevant forms of waste development.
- 9.79 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.
- 9.80 Several parts of the Plan area (particularly the Swale and Ure valleys and parts 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 (particularly where lakes are created following minerals extraction) as well as 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

⁴⁸ Flood risk assessments: climate change allowances (Environment Agency February 2016)

be cumulative in nature, either over extended periods of time or through a number of simultaneous effects.

- 9.81 Reclamation also provides potential opportunities for delivering 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. In certain areas, reclaimed sites may be able to play a role in flood risk reduction, or in supplying water for agriculture, or in recharging rivers.
- 9.82 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 reduction in landfill of biodegradable waste, and this is likely to continue as new arrangements for managing 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).
- 9.83 As a result, forms of low-level (i.e. below original ground level) reclamation are likely to be increasingly common. For hard rock quarries this means that sites will often be reclaimed to a landform significantly different to that which preceded the workings, and for sand and gravel quarries in river valleys where the water table is high, it would mean a continuing 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 impacts such as those referred to in para. 9.80 and, for reclamation involving lakes, potential conflict with airfield safeguarding requirements due to the attractiveness of lakes to flocks of birds.
- 9.84 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 and design of water-based restoration, particularly for biodiversity, given the importance of ensuring that any risk to aircraft from birdstrike⁴⁹ can be managed.

⁴⁹ 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.

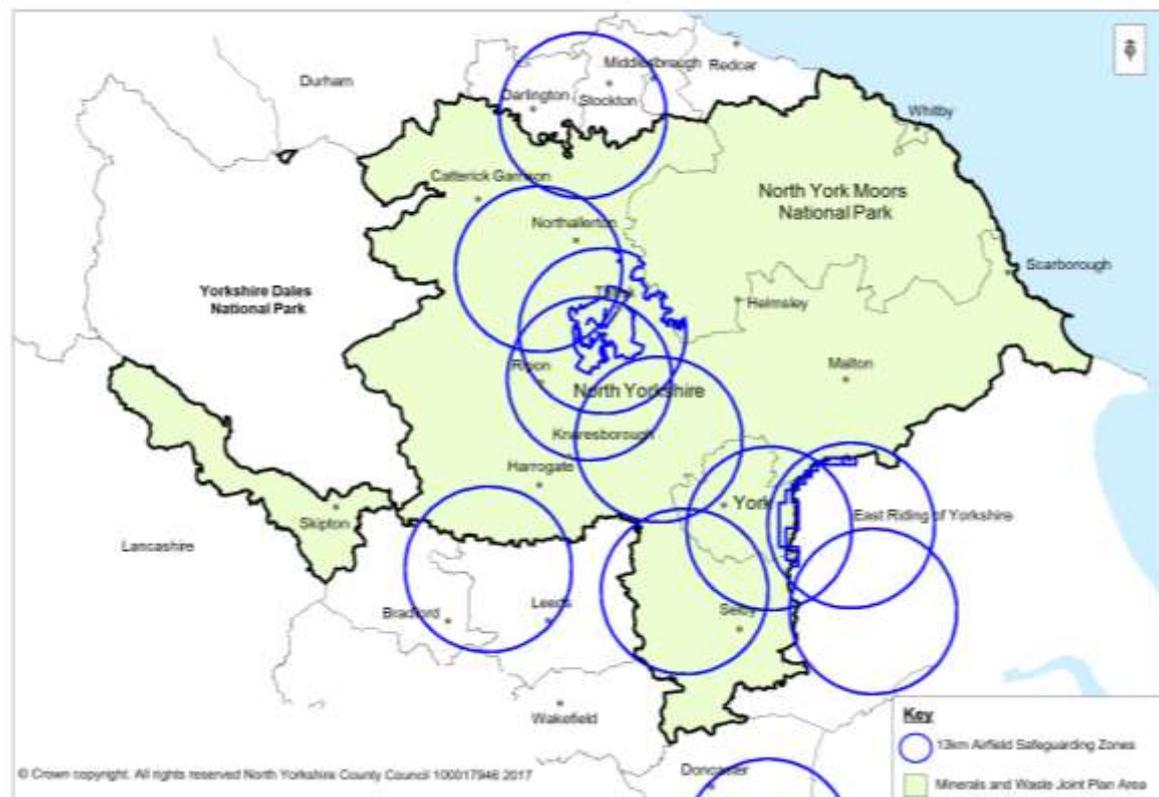


Figure 20: Airfield safeguarding zones

Policy D10: Reclamation and afteruse

Part 1)

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, where appropriate to the scale and location of the development, have demonstrably:

- i) Applicants are encouraged to discuss proposals at an early stage with local communities and other relevant stakeholders and where practicable reflect the outcome of those discussions in submitted schemes.**
- 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 imported waste where essential to deliver a high standard of reclamation;**
- vi) Provided for progressive, phased restoration where appropriate, providing 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 period will apply).**

Part 2)

In addition to the criteria in Part 1) above, proposals will be permitted which deliver a more targeted approach to minerals site restoration and afteruse by contributing towards objectives, appropriate to the nature, scale and 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 to 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) Achieving significant net gains for biodiversity which help create coherent and resilient ecological networks. Where practicable, proposals should contribute significantly to the creation of the habitats of particular importance in the local landscape seeking to deliver benefits at a landscape scale. This includes wet grasslands and fen in the Swale and Ure valleys and species-rich grassland on the Magnesian ridge;
- 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

Strategic Policies in Chapters 5, 6 and 7 and Policies D02, D04, D06, D07, D08, D09, D11, D12

Objectives 9, 10, 11, 12

Monitoring: Monitoring indicator 55 (see Appendix 3)

Policy Justification

- 9.85 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.

- 9.86 A high standard of reclamation is essential to ensure that development is sustainable. Applicants for minerals or waste development where reclamation is required will need to demonstrate, as part of their initial proposals, how this can be achieved and the intended timescale for delivery, which should be as soon as practicable. Proposals should include provision for phased reclamation where this would assist in minimising the overall impacts of the development. In bringing forward proposals, applicants should have regard to the national Planning Practice Guidance on Flood Risk and Coastal Change.
- 9.87 Particularly for proposals which are large in scale, or which would lead to restoration for a use other than the original (pre-development) use, or which are located in close proximity to local communities or in other sensitive locations, applicants should liaise with host communities and other relevant stakeholders, including statutory bodies, at pre-application stage when developing restoration and afteruse proposals. This can 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.
- 9.88 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 the subject of pre-application discussion with the relevant planning authority. Where reclamation proposals involve the import of waste materials in order to achieve a suitable landform, this should be justified in terms of the benefits to the standard of reclamation that would be achieved and will be assessed in the context of any additional adverse impacts resulting from the importation activity.
- 9.89 The very varied nature of the Plan area means that there are a wide range of contextual factors, constraints and opportunities that could be relevant to the reclamation of sites. To help ensure that, across the Plan area, maximum overall benefits are delivered, it is considered appropriate to encourage a more targeted approach to reclamation of sites. This can 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 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.
- 9.90 Proposals for reclamation should be included as part of the initial planning application. For longer term but temporary development, it may be appropriate for full details to be reserved for later approval, although the overall concept will need to be established at the outset. 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 a separate planning application which, in some instances in the NYCC area, would need to be determined by the relevant District/Borough Council.

- 9.91 For reclamation to agriculture and forestry, the statutory 5 year maximum aftercare period, which can be required via the imposition of conditions on any relevant planning permission, will be sufficient to achieve the required standard. Some forms of reclamation, particularly where the afteruse involves the creation of wildlife habitats, or where required in order to provide a degree of continuing control over certain types of afteruse, such as informal recreation, may need to be the 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. Policy M18 sets out specific further local policy in relation to restoration of sites for hydrocarbon development.
- 9.92 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 reflect relevant recommendations in their proposed approach.

Sustainable design, construction and operation of development

- 9.93 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
 - minimisation and where necessary mitigation of climate change causes and effects
- 9.94 National planning policy gives priority to achieving 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.
- 9.95 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 help adaptation to climate change, particularly where minerals site reclamation and afteruse include provision flood water storage, habitat restoration and other forms of green infrastructure.
- 9.96 The movement of material up the waste hierarchy⁵⁰ can help to mitigate climate change impacts. For example, recycling waste can save CO₂ by conserving virgin

⁵⁰ See waste context section in Chapter 2 for further information

materials that would otherwise be used in production, and by reducing landfill, which can lead to the emission of greenhouse gases.

- 9.97 The NPPF supports policies which promote the sustainability of a building. The North York Moors National Park Authority has, since 2008, been operating a policy which requires 10% of predicted CO₂ emissions to be off-set by requiring developments of 5 or more houses or other uses over 200sqm, to generate energy on-site from renewable resources. The emerging City of York Local Plan is proposing to require that new developments are in line with the 2013 Building Regulations by having a 19% reduction in Dwelling Emission Rate and a reduced water consumption rate.

Policy D11: Sustainable design, construction and operation of development

Part 1)

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 have been incorporated in its design, construction and operation in relation to:

- i) Minimisation of greenhouse gas emissions by incorporating 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 practicable and in a manner appropriate to the character and location of the development;**
- iv) Minimisation of water consumption by incorporating water efficiency measures including, where practicable, the re-use of waste water arising 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 new minerals and waste developments in excess of 1000m² floor space to meet a minimum 'Very Good' BREEAM or CEEQUAL standard as appropriate;**
- vii) For energy-from-waste development, the efficient generation of energy including, for development with the potential to generate combined heat and power, the beneficial use of heat either on site or incorporating measures to enable provision of heat to 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, incorporating 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 incorporating appropriate mitigation in the design of tips and slopes 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, as well as for hydrocarbon development, should be accompanied by a climate change assessment, as appropriate, showing how the proposals have taken into account impacts from climate change and include mitigation and adaptation measures where necessary.

Part 2)	
Proposals for new built development should demonstrate how the development would be designed, constructed and operated in order to:	
<ul style="list-style-type: none"> 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 separated 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	
<i>Strategic Policies in Chapter 5, 6 and 7 and Policies D07, D09, D10, D13</i>	<i>Objectives 9, 10, 11, 12</i>
Monitoring: Monitoring indicator 56 (see Appendix 3)	

Policy Justification

- 9.98 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 make acceptable developments that would otherwise be unacceptable, as well as helping to reduce overall adverse impacts. The incorporation of sustainable design measures such as sustainable drainage systems (SuDs), 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.
- 9.99 Particular design considerations can apply to quarries and mining waste tips. In particular, there is a need to ensure that quarry faces and any waste tips are designed to ensure the stability of slopes, to ensure the safety of the public and of employees. It is therefore important that proposals for new mineral working and/or the construction of mining waste tips are supported by information about any potential hazard to people and property, that the significance of any potential hazard is assessed, and that any features which could adversely affect the stability of the working are identified. In some cases extraction of mineral, particularly aggregate, can involve pumping 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.
- 9.100 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 management facilities 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.

- 9.101 National planning policy gives high priority to achieving high design standards as an important element of sustainable development. With regard to waste, it seeks provision for waste management to be incorporated in the design of other forms of development, as well as the use of design measures to ensure 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. Using materials sustainably in new development and in repair and refurbishment provides opportunities to help to conserve natural resources and move waste up the hierarchy. The sustainable design of buildings can also help to 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 CEEQUAL⁵¹ rating criteria for civil engineering and infrastructure works then proposals in excess of 1000m² floor space should seek to meet a minimum 'Very Good' standard. Increased energy efficiency can also be secured by 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 electrical power generation.
- 9.102 Planning has an important role in delivering sustainable development, mitigating and adapting to climate change and helping the country to 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. These thresholds are based on the 75,000 tonnes per annum threshold for strategically significant waste facilities used in the Yorkshire and Humber Waste Position Statement, which has been applied also to minerals output for the purposes of Policy D11.
- 9.103 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 make development more sustainable. Proposals for all forms of built 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 be substituted for primary minerals in the development, and where relevant, incorporate

⁵¹ CEEQUAL is a sustainability rating and assessment scheme for civil engineering and infrastructure projects, similar to the BREEAM rating system for buildings.

space in designs to facilitate the separation and storage of waste arising during the operational life of the development.

Protection of agricultural land and soils

- 9.104 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	
<p>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 proposals should prioritise the protection and enhancement of soils and the long term potential to recreate areas of best and most versatile land. Where relevant, development will be subject to aftercare requirements to ensure that a high standard of agricultural restoration can be achieved.</p>	
<p>Development proposals will be required to demonstrate that all practicable steps will be taken to conserve and manage on-site soil resources, including soils with environmental value, in a sustainable way. Development which could lead to irreversible damage to blanket peat or other soil contributing to ecological connectivity or carbon storage will not be permitted.</p>	
<p>Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry</p>	
<p>Key links to other relevant policies and objectives</p>	
<p><i>Strategic Policies in Chapters 5, 6 and 7 and Policies D07, D10</i></p>	<p><i>Objectives 9, 10, 11, 12</i></p>
<p>Monitoring: Monitoring indicator 57 (see Appendix 3)</p>	

Policy Justification

- 9.105 The Plan area contains very large areas of land in use for agriculture, particularly within the NYCC area. A substantial proportion 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.
- 9.106 Whilst it is unlikely that there will be a need to develop 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. To meet future needs for minerals it is expected that development of agricultural land, including some land of best and most versatile quality, will be necessary as a result of the wide range of other constraints that apply in identifying suitable locations for mineral working, including the fact that minerals can only be worked where they occur.

- 9.107 Proposals involving development of more than 1ha of agricultural land should be accompanied by sufficient information to demonstrate the quality of the land within the site, in accordance with the national agricultural land classification system. 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 maintains 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 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 noisy activities, such as soil-stripping and bund formation.
- 9.108 Where reclamation of mineral workings to agriculture is proposed, an aftercare period will be required (usually for 5 years) 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.
- 9.109 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 to ensure that their value is preserved for the future.

Coal Mining Legacy

- 9.110 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.
- 9.111 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 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

Where development, other than exempt development as defined in the Development High Risk Exemptions list, as set out in paragraphs 9.116 and 9.117, is proposed within Development High Risk Areas identified by the Coal Authority as shown on the interactive Policies Map and on page 4 of the paper version of the Policies Map, proposals 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	
<i>D11</i>	<i>Objectives 9, 10</i>
Monitoring: Monitoring indicator 58 (see Appendix 3)	

Policy Justification

9.112 National planning 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.
- Ensuring that development should not be placed in unstable locations without various precautions, and
- Bringing unstable land back into productive use, wherever possible.

9.113 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. They occur mainly within Selby District and more limited locations in the North York Moors National Park and in the western part of the Plan area. Low Risk Development Areas are more extensive.

9.114 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 in the Development High Risk exemptions lists in paragraphs 9.116 and 9.117 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.

9.115 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.

9.116 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),

- 9.117 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.

Air Quality

Policy D14: Air Quality	
Proposals for mineral and waste development will be permitted provided that:	
(a) there are no unacceptable impacts on the intrinsic quality of air; and	
(b) there are no unacceptable impacts on the management and protection of air quality, including any unacceptable impacts on Air Quality Management Areas.	
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry	
Key links to other relevant policies and objectives	
<i>M01, M11, M17, M20, W10, W11, I01, I02, D02, D03, D11</i>	<i>Objectives 1, 5, 7, 8, 10, 11</i>
Monitoring: Monitoring indicator 59 (see Appendix 3)	

Policy Justification

- 9.118 The chapter in the PPG on Air Quality provides guiding principles on how planning can take account of the impact of new development on air quality. It states that ‘Local Plans can affect air quality in a number of ways, including through what development is proposed and where, and the encouragement given to sustainable transport. Therefore, in plan making, it is important to take into account air quality management areas (AQMAs) and other areas where there could be specific requirements or limitations on new development because of air quality.’
- 9.119 Planning guidance and case law makes clear that just as environmental impacts are material considerations, so too is the existence of regulatory regimes which seek to control such impacts. There exist a number of issues which are covered by other regulatory regimes and mineral planning authorities should assume that these regimes will operate effectively. Whilst these issues may be put before mineral planning authorities, they should not need to carry out their own assessment as they can rely on the assessment of other regulatory bodies. However, before granting planning permission they will need to be satisfied that these issues can or will be adequately addressed by taking the advice from the relevant regulatory body. The Mineral Planning Authorities will therefore carry out consultation with other appropriate regulatory bodies (such as the Environment Agency, Health and Safety Executive and the Oil and Gas Authority in this context.
- 9.120 Where air quality is a particular issue, the Authorities will consider:
- where air pollution arises;
 - measures that can be taken to ensure that developments in areas of particular concern with regards air quality do not give rise to additional unacceptable air quality impacts; and,

- the potential for cumulative impacts arising from both smaller developments as well as the effects of more substantial developments.

Planning Obligations

- 9.121 Development of land will, to varying degrees depending on its nature and location, impact on the environment, communities, amenities and physical infrastructure of the Plan area. As such the authorities will, where there is appropriate justification, expect development to mitigate or compensate for the extent of this impact through the use of planning obligations on the granting of planning permissions. Planning obligations also known as Section 106 agreements under the Town and Country Planning Act 1990 (as amended), are benefits that may be in kind or take the form of financial contributions. Section 106 agreements are legally binding undertakings which seek to secure that development is acceptable, by securing contributions to offset negative consequences of development.
- 9.122 Prior to the submission of relevant applications within the Plan area, developers/applicants are encouraged to engage in the pre-application process to determine whether there is likely to be a requirement for a Section 106 agreement in respect of a particular proposal.

Policy D15: Planning Obligations	
Developer contributions will be sought to eliminate or mitigate the potential adverse effects of new development on site or on the surrounding area, and to ensure the provision of any necessary and adequate improvements to infrastructure to support the functioning of the development.	
The level of contributions required will be negotiated as part of a Section 106 agreement, or set out in any adopted Community Infrastructure Levy Charging Schedule or successor framework.	
Contributions will only be sought where they are necessary to make the development acceptable in planning terms and where they are fairly and reasonably related to the development in scale and kind.	
Main responsibility for implementation of policy: NYCC, NYMNPA, CYC, Minerals and Waste industry	
Key links to other relevant policies and objectives	
<i>D01, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11, D12</i>	<i>Objectives 9, 10, 11</i>
Monitoring: Monitoring indicator 60 (see Appendix 3)	

Policy Justification

- 9.123 Section 106 of the Town and Country Planning Act 1990 provides a mechanism for planning obligations, in order to make development acceptable in planning terms which would otherwise not be acceptable. This can include the making of a financial contribution towards measures (which may be off-site in some circumstances) where needed to mitigate against or compensate for the impacts of the development. Such contributions should be proportionate to the scale and nature of the development and the matters which need to be dealt with. The minerals and waste planning authorities will seek such agreements where justified and where they would be in accordance with relevant legislation and guidance.

Community Infrastructure Levy and Planning Performance Agreements

- 9.124 The Community Infrastructure Levy (CIL) is a planning charge, introduced by the Planning Act 2008 as a tool for local authorities in England and Wales to deliver infrastructure to support the development of their area. It came into force on 6 April 2010 through the Community Infrastructure Levy Regulations 2010. NYCC is not a CIL-charging authority. City of York Council and the North York Moors National Park Authority have not yet adopted any CIL policy. However, should CIL be introduced in either of these areas any relevant obligations relating to minerals and waste development would need to be met.
- 9.125 A Planning Performance Agreement (PPA) is defined as an agreement between the local planning authority (or minerals and waste planning authority in the context of this Joint Plan) and an applicant to provide a project management framework for handling a planning application. A PPA enables the planning authority and the applicant to agree timescales, actions and resources for handling a particular application. It should cover the pre-application stages but may also extend through to the post-application stage. PPAs can be particularly useful in setting out an efficient and transparent process for determining large and/or complex planning applications. They encourage joint working between the applicant and the planning authority and can also help to bring together other parties such as statutory consultees. Their form can vary in type from a detailed legal document through to a much simpler memoranda of understanding. Due to the scale and complexity of some minerals and waste developments, it may be appropriate for a planning application to be dealt with through a PPA.

Chapter 10: Introduction to Site Allocations

- 10.1 In order to help support delivery of the policies in the Joint Plan, a range of sites are identified as allocated sites in Appendix 1. These are sites which have been submitted to the Authorities for consideration for allocation during preparation of the Joint Plan and which are considered suitable in principle for the forms of development proposed, following application of a site selection process, including sustainability appraisal. In a small number of instances Preferred Areas have been identified. These are broader areas within a defined boundary in which it is considered that there is likely to be potential to develop a suitable site, for example in order to meet longer term requirements for a particular mineral. 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. The information accompanying each site allocation also identifies a range of key matters, identified as part of the site assessment process, to inform the content of such an application.

Appendices

The following appendices form part of the Joint Plan.

APPENDIX 1 - ALLOCATED SITES AND AREAS OF SEARCH

APPENDIX 2 - SAFEGUARDED SITES

APPENDIX 3 - MONITORING FRAMEWORK

APPENDIX 4 - SAVED POLICIES TO BE REPLACED BY THE MINERALS AND WASTE
JOINT PLAN 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 needs 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 Statutory 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.
Area of Search	An area identified as having minerals resources potentially suitable for extraction and where working may be acceptable subject to more detailed assessment at project stage.
Authorities Monitoring Report (AMR)	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.

Best and Most Versatile Agricultural Land (BMVL)	Defined as Grades 1, 2 and 3a by Agricultural Land Classification methodology. BMVL 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.
CEEQUAL	A sustainability rating and assessment scheme for civil engineering and infrastructure projects, similar to the BREEAM rating system for buildings.
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).
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 (CD&E)	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 Assessment	Formal process used to predict the environmental consequences (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 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.
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 including those used for 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 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 cause 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 injecting 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 or as electrical energy.
Incinerator Bottom Ash (IBA)	Ash produced during burning waste in an incinerator. It has the potential to be processed and used as a secondary aggregate.

Landbanks	A landbank is a stock of land with planning permissions for the winning and working of minerals, usually expressed in terms of assumptions about annual production rates.
Landfill	Disposal of waste into the land. Usually involves the infill of pre-existing voids. Land raise 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 other 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 (LLR waste)	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 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

	<p>are in the public interest. These applications should include assessment of:</p> <ul style="list-style-type: none"> - 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. <p>Major development in the context of the major development test is not defined and is determined on a case-by-case basis.</p>
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.
Municipal waste	Comprises mainly household and some other waste for which the waste collection and disposal authorities have responsibility forms an element of 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.

Planning Practice Guide (PPG)	More detailed advice 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)	PEDLs cover the three main stages of petroleum activity which are exploration, appraisal and development. The licence provides exclusivity to the holder to undertake seismic investigations, drill wells and develop discoveries. PEDLs are issued by the Oil and Gas Authority, an Executive Agency of DBEIS.
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.
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.
Preferred area	An area identified as having policy support for development but where it is not practicable to define a specific development boundary.
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 and have the benefit of planning permission.
Residential buildings	For the purposes of the Plan this includes any permanent building which is normally occupied by people or would be so occupied, if it were in use for purposes for which it is designed.
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 alternative or 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 (RSA)	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	Identified sites with a specific boundary which could deliver the policies within the Minerals and Waste Joint Plan.
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 certain commercial uses 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 undertaken by a local authority or group of local authorities to consider flood risk and examine the risks involved in developing certain areas within the County.
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 can 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 Drainage (SuDs)	SuDS are an approach to managing rainwater falling on roofs and 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 each with responsibility 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 and coal mine 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 seeks 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