

Minerals

Introduction

- 15.1 Mineral resources are an important element of the economy. They provide the raw materials for a number of industries, in particular those of construction, manufacturing and agriculture. Their exploitation provides direct employment and supports numerous jobs in these and other related industries. The restoration of mineral workings can help to create new habitats, diversify land use and landscapes and create new open space. However, their working can also have significant detrimental effects on the environment through damage due to noise, dust, and traffic. The loss of land and impacts upon archaeological sites can also occur, as a result of mineral working.
- 15.2 An important aspect of mineral planning, which is different to other types of land use planning is that mineral resources can only be worked where they are found. This can lead to conflicts with other land uses. The presence of particular mineral resources sometimes coincides with areas of attractive or environmentally important landscapes such as in the chalk uplands of the Lincolnshire Wolds or the peat deposits of the Crowle Moors. This presents specific challenges in trying to achieve a balance between protection of the environment and meeting the need for minerals. It is also important to ensure that minerals are worked in a planned fashion over time to make optimum use of these finite resources.
- 15.3 North Lincolnshire Council has responsibility for all mineral planning matters within its area under the provisions of the Town and Country Planning Act 1990. This includes the processing of planning applications for the winning and working of minerals and associated developments and the production of Mineral Planning policies.
- 15.4 Government guidance on minerals planning is set out in Mineral Planning Guidance Notes (MPGs), Planning Policy Guidance Notes (PPGs) and Regional Planning Guidance for the Yorkshire and Humber region. The advice forms the basis for the policies and proposals of the Local Plan and for development control decision making.
- 15.5 The working of minerals is a fundamentally unsustainable activity. However, while accepting society's unavoidable need for minerals, there is considerable scope for minimising the negative effects of mineral working and conserving resources through proper planning. The policies and proposals of the Local Plan have therefore been prepared with the protection of the environment as a central theme. The Local Plan also seeks to ensure that where practicable the highest grade mineral resources are reserved for the most appropriate use.
- 15.6 The Local Plan covers all minerals within North Lincolnshire which may be worked during the Plan period. Separate inset maps identify these areas.
- 15.7 A policy for the processing and supply of secondary and recycled aggregates is also included. The Local Plan does not cover marine won aggregates or offshore oil and gas as these lie outside planning control. Their extraction is governed by licences issued by the DETR and Welsh Office.

Geology

- 15.8 North Lincolnshire has significant deposits of a wide variety of minerals

of which the most important are silica sand, chalk, limestone, clay and peat. There are also reserves of oil, gas, ironstone, sand and gravel. Exposures of the solid geology in the area occur mainly in the upland areas of the Lincolnshire Wolds and around the Scunthorpe area. The remainder of the area is overlain extensively with drift deposits consisting mainly of alluvium, peat, blown sands and boulder clay. Chalk of the Upper Cretaceous period underlies much of the area to the east and outcrops of Jurassic limestone occur to the south of Scunthorpe. To the north are outcrops of the Frodingham Ironstone. Further west in the Trent Valley layers of Quaternary deposits are underlain by Mercia Mudstone (formerly known as Keuper Marl). Blown sands are found in the areas around Messingham and Manton.

Recycling and Secondary Aggregates

- 15.9 It is Government policy to encourage the use of secondary aggregates and recycled materials in order to reduce the need for primary mineral extraction and to reduce the need for landfill. MPG6 suggests that up to 65 million tonnes of aggregates may be produced by secondary and recycled sources in the Yorkshire and Humber region for the period up to 2006.
- 15.10 Secondary aggregates are those materials suitable for aggregate uses which are a by-product from other mineral extraction processes or from other processes such as power generation and steel making. Materials such as colliery shale, pulverised fuel ash, furnace bottom ash and blast furnace slag are included in this category. Recycled materials come from two main sources: construction and demolition wastes and road planings.

- 15.11 There are a number of problems associated with the viability of secondary and recycled materials. The cost of transporting the materials is a major problem as the low cost and quality of the materials allows little scope for price elasticity and in this area they are competing with comparatively cheap primary aggregates. However, the situation in North Lincolnshire is better than in some parts of the rest of the UK due to the availability of blast furnace slag within the area and the proximity of arisings from the coal and power generation industries.
- 15.12 Another problem is the ability of these materials to meet high specification end uses, such as in road construction, as their use is often precluded by technical requirements. This issue is being tackled at national level and their use may become more common in the future.
- 15.13 Sites for processing and sorting materials require good transport links. Areas for stockpiling, sorting and despatch may require associated plant and machinery. Such sites should ideally be located away from residential and other potentially sensitive areas, and should be well screened.
- 15.14 Aggregate recycling facilities may often be suited to existing mineral working sites. However, prolonging activities at a site may prejudice its long term restoration. No other material reclamation or waste storage should take place at such sites. The Council supports the move towards the use of a higher proportion of secondary and recycled aggregates and supports the national targets set out in MPG6 (40 million tonnes per annum (mtpa) by 2001 and 55mtpa by 2006).

Mineral Workings

Sand and Gravel

- 15.15 Sand and gravel deposits for aggregate use are distributed sporadically across North Lincolnshire but there are only a few areas where its exploitation is economically viable. Small scale workings are found in the Trent Valley and on the southern edge of the Humber but it is likely that the area will continue to be a net importer of sand and gravel for aggregate use.
- 15.16 Government advice for securing supply to meet forecast demands for aggregates on a national and regional basis is presented in MPG6: Guidelines for aggregate provision in England. This advice is based upon past consumption and forecast demand over the period 1992 to 2006 and is currently being reviewed. Advice contained within the MPG recommends that a landbank of permitted reserves for sand and gravel sufficient for at least seven years' supply should be maintained at all times. The Guidance also identifies the regional apportionment of demand for aggregates to the Yorkshire and Humber Region. The sub-regional apportionment of aggregate production is calculated by the Regional Aggregates Working Party and figures are agreed by the member authorities for use in plans.
- 15.17 Information on sand and gravel supply and demand for the region is collected and assessed by the Yorkshire and Humber Region Aggregates Working Party (YHRAWP). This is a technical group made up of officers of the mineral planning authorities in the region, the DETR, The Quarry Products Association, British Geological Survey, Farming

and Rural Conservation Agency and The Coal Authority. The information collected is presented as an Aggregates Monitoring Survey every four years. An Annual Monitoring Report and Survey is also published.

- 15.8 The Yorkshire and Humber Region Aggregates Working Party assessed the requirements set out in MPG 6 and advised the Regional Planning Conference (RPC) of its recommendations. The RPC commended a figure of nine million tonnes of sand and gravel for the former County of Humberside for the period 1992 - 2006. This equated to an average production of some 0.6 million tonnes per annum. North Lincolnshire Council is committed to fulfilling its role in the Regional Apportionment of aggregate sand and gravel and an assessment of the relative proportion of its contribution to the region's figures is currently being made.

Table 12 - Sand and Gravel Requirement for the North Lincolnshire Area

Sub regional apportionment for period 1992 - 2006 (i.e. 30% of the total)	2.7mt (9.0)
Less 1992 - 1997 production element (6x 0.18mt)	1.08 mt (3.6)
Sub total : North Lincolnshire requirement 1996 - 2006	1.62mt (5.4)
Plus 7 year landbank at 2006 (7x0.18mt)	1.26mt (4.2)
Sub total North Lincolnshire requirement 1996 - 2006	2.88mt (9.6)
Less permitted reserves at 31.12.97	2.5mt
North Lincolnshire Provision required	0.38mt

Figures in brackets show the YHRAWP sub-regional apportionment for the former Humberside County area.

Figures are rounded where appropriate and relate to calendar years. Permitted reserves of

2.5 million tonnes are composed of the sites identified in policy M12'

Silica Sand

15.19 Silica sand is worked at sites near Messingham and Manton and has been worked in the Isle of Axholme near Haxey. In the latter case the highest grade silica sand has been worked out and sand extracted is now used primarily for building purposes, although some is used for filler in cement manufacture. Silica sand is most commonly used for industrial purposes including foundry use and glass making. For this reason it is a strategically important mineral and the area makes an important contribution to the national need for the mineral. MPG15 - Provision of Silica Sand in England, emphasises its importance as a national economic resource.

Chalk

15.20 There are three operational chalk sites in North Lincolnshire (Melton Ross quarries, Ulceby Vale quarry, Ulceby and Middlegate quarry, South Ferriby) Use of the material as an aggregate is limited due to its softness and susceptibility to frost. However, it is used as a fill material and the higher quality chalk deposits are used for a range of specialist applications such as fillers or extenders in the paper industry, as a flux in the steel making process, for cement manufacture and as agricultural lime. Permitted reserves for chalk within North Lincolnshire exist well beyond the 10 year Plan period for each type of use. For this reason no allocations for chalk extraction have been made in the Local Plan. However, it will be important to keep the position under review.

Limestone

15.21 One site at Kirton in Lindsey is being worked for limestone, its primary use being for bulk constructional fill.

Crushed Rock

15.22 MPG 6 provides guidance on the supply and demand of aggregate crushed rock and recommends that it may be appropriate to maintain a land-bank of this for a period in excess of 7 years. Data on the production and consumption of crushed rock for aggregate and industrial use is also collected and analysed by the Yorkshire and Humber Region Aggregates Working Party. The sub-regional apportionment is commended to the Regional Planning Conference in the same way as for sand and gravel. In the period 1992-2006 the sub-regional apportionment was eleven million tonnes for Humberside which equated to an annual production figure of 0.73 million tonnes. The Council is committed to maintaining its role in the apportionment of aggregate crushed rock in the region.

Table 13 - Crushed Rock Requirement for North Lincolnshire

Sub regional apportionment for North Lincolnshire area 1992- 2006 (i.e. 50% of total)	5.5mt (11.0)
Less 1992- 1997 production element (6x 0.366mt)	2.2 mt (4.4)
Sub total - North Lincolnshire requirement to 2006	3.3mt (6.6)
Plus ten year landbank at 2006 (10 x 0.366 mt)	(7.3)
SUB TOTAL North Lincolnshire 1996 - 2006	6.96 mt (14)
Less actual permitted reserves of aggregate crushed rock	30.25mt
Total North Lincolnshire provision required can be met	23.25mt surplus
Landbank for crushed rock at 31.12.97 based upon apportionment i.e. 0.366 mt per annum	82.6 years
Landbank for crushed rock at 31.12 .97 based upon average actual production i.e. 0.137 mt per annum	220.8 years

Clay

15.23 There are a number of operational clay extraction sites within North Lincolnshire (Low Melwood clay pits, Pasture Road, Barton upon Humber and Goxhill Tileries). The majority provide alluvial clays for tile manufacture, although some brick production takes place and some materials are used in cement manufacture. Clay has also been increasingly used as low permeability liner material for waste disposal sites.

Peat

15.24 Peat extraction is carried out in the west of the authority area at Crowle Moors. Much of the peat cutting takes place under a single 1940s planning permission with limited restoration

conditions. These conditions are currently being updated to enable restoration to a nature conservation after-use for the area under the Environment Act 1995.

Oil and Gas

15.25 A number of exploratory wells have been sunk over the last 40 years in the North Lincolnshire area and oil production commenced in the 1980s at the Crosby Warren well site to the north east of Scunthorpe. Further exploration may be carried out in the future under licences issued by the Department of Trade and Industry. MPG16 outlines the policies and requirements for onshore exploration.

Ironstone

15.26 Most of the ironstone used in the steel industry is currently imported but significant deposits of ironstone exist around Scunthorpe. There is no indication that it will be worked in the short term; however, the mineral remains a significant resource and may be required in the future.

Marine Dredged Aggregates

15.27 The United Kingdom is second only to Japan in terms of the production of marine aggregates. There are six main dredging areas off the coast of England. The area of the North Sea off the Humber is one of the most important. Planning controls are limited to the siting of wharves where the minerals are unloaded. Although there are currently no facilities in North Lincolnshire handling marine won materials, the potential exists for future development.

M1 - Applications for Mineral Working

Proposals for mineral extraction will be permitted provided that:

- i) adequate proposals are made to minimise visual and other amenity impacts to an acceptable level; and**
- ii) the proposed order and method of working, and overall programme for extraction are satisfactory; and**
- iii) the proposals and programme for progressive restoration are satisfactory, and are accompanied by proposals for beneficial after-use and management of the land; and**
- iv) the local road network or other proposed transport facilities are adequate**

15.28 In considering applications for mineral extraction it is necessary to draw a balance between the environmental impacts which may result and the need for the mineral in question.

M2 - Secondary Aggregates and Recycled Materials

Proposals which involve the use of secondary aggregates and recycled materials will be supported. Sites for the processing of such materials should not be located adjacent to residential or other sensitive areas, should be well screened and have good access to the transport network.

15.29 Greater use of recycled materials and secondary aggregates could help to reduce the need for quarrying, and to a certain extent, landfilling.

M3 - Residential Amenity and Protection Zones

Mineral working and processing will not be allowed directly adjoining existing or proposed housing or other land uses where unacceptable impacts may arise. The width of separation (buffer zone) will depend on the nature of proposed working, the scale of the potential impact and the potential to use other successful mitigatory measures.

15.30 Residential amenity is a key concern in the determination of mineral working proposals. Wherever possible the effects of mineral workings will be kept away from all residential areas by the use of protection zones.

M4 - Ancient Monuments and Archaeological Sites

Proposals for minerals development affecting sites of known or potential archaeological importance must be accompanied by an archaeological assessment and where necessary, a field evaluation which includes proposals for the preserving in situ of the archaeological interest or where this is not justified, for excavating and recording remains.

Minerals development affecting Scheduled Ancient Monuments or other nationally important archaeological sites will not be allowed unless the reasons for the development clearly outweigh the archaeological value of the site itself. In such cases there shall be a presumption in favour of the physical preservation in situ of such sites and their settings.

15.31 Where the preservation of the site in situ proves impracticable, development may well involve the destruction of the site. In such cases evidence will be required to demonstrate that the developer has made appropriate and satisfactory provision for the excavation and recording of the remains, including negotiations with officers of the Council and consultant archaeologists as necessary.

M5 - Best and Most Versatile Agricultural Land

Applications for new mineral working on the best and most versatile agricultural land (grades 1, 2 and 3a) will be allowed only where it can be shown that restoration and after-care will preserve the long term potential of the land as a national, high quality, agricultural resource. Where non-agricultural uses are proposed as after-uses on the best and most versatile agricultural land, the methods used in restoration and after-care should enable the land to retain its longer term capacity to be farmed to its former land-classification potential, thus retaining a high quality resource for the future

15.32 It is Government policy to protect the best and most versatile agricultural land defined as being of Grades 1, 2 and 3a. Such land is regarded as being a nationally important resource and should be protected from irreversible loss.

M6 - Proposals for Mineral Extraction on Sites Allocated for Development

Operators making planning applications for mineral extraction on sites allocated for other forms of development will be required to show how the site will be worked without

prejudicing the subsequent proposed development.

15.33 Due to the incomplete geological knowledge of North Lincolnshire, there may be instances where land allocated for other development is found to contain significant mineral deposits. It may be practical to extract the deposit before commencing with the permitted development. However, in such cases it will be necessary for the operator to indicate how the site will be restored to a state where it may be developed in the allocated way and that no contamination or instability of the land will arise.

M7 - Transportation of Minerals

Planning permission for new mineral workings will only be granted where the Council is satisfied that the level of traffic movements can be accommodated on the local road network, and where impacts on local communities can be reduced to an acceptable level. Applications involving the transportation of minerals by means other than by road, including rail, barge, pipeline or conveyor, will generally be viewed favourably provided no unacceptable environmental impacts result.

15.34 The environmental impact of mineral workings and transport impacts in particular can sometimes be reduced by the use of other available transportation means. The planning authority wishes to see that alternative options are given full consideration. The impact of HGV traffic can be reduced through the imposition of conditions on the hours of working of the site, the maximum number of vehicle movements per day and the detailed design of the site access. Where appropriate, traffic routing agreements may be used but these are voluntary and require the co-operation of the operator to maintain compliance.

M8 - Safeguarding Aggregate Minerals

Existing aggregate mineral resources, wharves and railhead facilities used in conjunction with the transportation of minerals will be safeguarded from development that may otherwise sterilise or adversely affect their operation.

15.35 *The planning system has an important role to play in safeguarding deposits which may be or may become of economic importance from unnecessary sterilisation by surface development.*

M9 - Planning Obligations

Where it is deemed necessary to undertake highway improvements on local roads in order to allow mineral working to proceed, the Council will seek to conclude legally binding obligations under Section 106 of the Town and Country Planning Act 1990 or other appropriate legislation before the granting of permission.

15.36 *In certain cases where permission for mineral extraction is otherwise acceptable the local road network may not be sufficient to cope with the additional road movements of associated traffic and some improvements may be required. In such circumstances, the Council will insist that such improvements are implemented prior to the commencement of the mineral extraction. The Council may use legally binding agreements to achieve this.*

M10 - Phasing and Progressive Reclamation

All mineral applications must be accompanied by detailed proposals for subsequent reclamation of the site, whether for the resumption of the former land use or for a new use. A

detailed scheme of working, incorporating a progressive reclamation scheme will also be required. Where restoration is for agriculture, forestry or amenity use, aftercare of the site shall be required for a period of five years from the completion of restoration. Planning conditions will be imposed upon permissions in order to guarantee that restoration and aftercare will commence even if this is earlier than the scheduled date for the cessation of working following incomplete extraction of the mineral.

15.37 *Considerable opportunities exist during the operational life of mineral workings to minimise their environmental impact through the phasing of workings and the achievement of early restoration benefits through a progressive restoration strategy. The Council strongly encourages these approaches to site working and will place an emphasis on the provision of appropriately detailed schemes as part of planning applications.*

15.38 *Aftercare of restored mineral workings is an important requirement to ensure that the site is maintained following its completion and so that the restoration can become established. In order to ensure that mineral working sites are not left derelict in the event of early or incomplete extraction of the mineral, conditions to implement reclamation immediately following the cessation of mineral workings will be imposed.*

M11 - Sand and Gravel

Proposals for sand and gravel extraction will only be granted:

- i) in order to secure continuity of supply for a geographical area because permitted reserves are nearing exhaustion and the area would otherwise not be**

adequately supplied without transporting minerals over significant distances by road; or

ii) where there would be a reduction in the adverse environmental impacts of existing workings.

15.39 The majority of the traditional sources of sand and gravel in the area are becoming exhausted and no significant replacement deposits are currently known. These factors, along with a shortage of detailed geological knowledge mean that the precise definition of future workings is difficult. It is anticipated that the area will remain a net importer of aggregate sand and gravel. The policy allows for the area's continued contribution to the region's figures for production and consumption.

M12 - Sand and Gravel, Future Extraction

Reserves of land with planning permission for the winning and working of aggregate sand and gravel (a landbank) of at least seven years will be maintained throughout the plan period.

Proposals for sand and gravel extraction will be permitted within the following areas:

- 1) Land west of Willow Holt, Flixborough**
- 2) Land at Cove Farm, Haxey**

15.40 For the period 1996-2006 provision will be made for the supply of 2.88 million tonnes of aggregate sand and gravel, this figure being 30% of YHRAWP requirement for that period. A landbank of permitted reserves will

be maintained providing for at least 7 years' production.

15.41 Sand and gravel is a resource of regional importance and it is necessary for the plan to make appropriate provision for the continued adequate supply of the material. Demand for the mineral and the area's contribution to the regional supply are expected to continue for the foreseeable future.

M13 - Crushed Rock

Reserves of land with planning permission for the winning and working of aggregate crushed rock (a landbank) of at least ten years will be maintained throughout the plan period.

Proposals for crushed rock extraction will only be granted:

- i) in order to secure continuity of supply for a geographical area because permitted reserves are nearing exhaustion and the area would not otherwise be adequately supplied without transporting minerals over significant distances by road; or**
- ii) where there would be a reduction in the adverse environmental impacts of existing workings.**

15.42 MPG 6 provides guidance on the supply and demand for aggregate crushed rock. This policy gives some flexibility to permit extensions to existing workings, to meet unforeseen demand, to ensure continuity of supply and to allow the area's contribution to the region's supply of crushed rock to be maintained where possible.

M14 - Borrow Pits

Planning permission for borrow pits will be permitted where:

- i) the material extracted will only be used in connection with the specific project with which the borrow pit is associated;**
- ii) the borrow pit is located close enough to the development scheme it is intended to supply in order to avoid or minimise the use of local public roads;**
- iii) its life is limited to that of the development project in question;**
- iv) extraction would represent an overriding net environmental benefit when compared with extraction from existing permitted sources, taking into account the availability of secondary and recycled aggregates;**
- v) proposals are submitted which allow restoration within the timescale of the associated project and which minimise the amount of any imported materials.**

15.43 *Planning permission for borrow pits is required except where they are very small and located entirely within the boundary of highway construction sites. In considering such proposals it will need to be demonstrated that the borrow pit represents the most suitable source of material to satisfy the specific demand involved and that both working*

and restoration can be achieved without causing unacceptable environmental impacts. Particular emphasis will be placed upon restoration proposals to create habitats such as wet and dry heathland and reedbeds in keeping with local and national biodiversity targets and provision of habitats for protected species such as water vole, bats and great crested newts.

M15 - Safeguarding of Clay Reserves

Areas for clay working will be safeguarded for use by the local clay tile and brick industries at the following sites:

- 1) land adjacent/east of Barrow Tileries, Barrow Haven**
- 2) land adjacent/ north of Far Ings Road, Barton upon Humber.**
- 3) land north of South Marsh Farm, east of Falklands Way, Barton upon Humber**
- 4) land west of Low Melwood Farm adjacent the C204 between Epworth and Owston Ferry**

15.44 *North Lincolnshire has several good quality clay reserves and it is important to safeguard these areas for the continued working of clay by the local clay tile and brick industries. The areas for safeguarding are identified on the proposals map.*

M16 - Safeguarding of Messingham Village

Unless it can be shown that there will be no significant adverse effects due to mineral related road traffic, planning permission for new sand working or new processing plant at Messingham will only be granted where mineral extracted on the east side of Messingham is processed on the east side and mineral extracted on the west side of Messingham is processed on the west side.

15.45 *Some problems with traffic and proximity of workings to residential areas in Messingham and Manton were experienced prior to the implementation of the Messingham Development Brief (1980) and the avoidance of these problems will continue to be an objective of planning policy. In particular, the movement of heavy goods traffic from the point of extraction to processing plant will continue to be restricted. At present a traffic routing arrangement requires westbound lorries from sand workings to the east of Messingham to travel via Scotter whilst only eastbound heavy goods vehicles travel through the village. At present, workings are undertaken on both sides of the village. However, processing facilities are currently on the east side of the village off Brigg Road.*

M17 - Messingham Protection Zone

A protection zone of 600 metres from the development boundary of Messingham village will be maintained. Within this area planning permission for new mineral workings will not be permitted.

15.46 *A protection zone has formed an important part of the policy framework for protecting residential amenity in Messingham and this will be*

maintained in order to safeguard residential areas from possible additional development during the Local Plan period.

M18 - Silica Sand Future Supply

Proposals for development which would sterilise reserves of silica sand will not be permitted except in circumstances where the benefits of the development clearly outweigh the strategic importance of the mineral.

M19 - Silica Sand Future Extraction

Reserves of land with planning permission for the winning and working of silica sand (a landbank) of at least 10 years will be maintained throughout the plan period

Proposals for silica sand extraction will be permitted within the following areas:

- 1) **land adjacent/west of North Moor Road, Messingham**
- 2) **land east of Scallow Grove and adjacent/east of Kirton Road, Messingham**
- 3) **land adjacent/west of the Lincoln edge, north west of Manton**
- 4) **land at Black Nook Wood**

15.47 *Silica sand is a resource of strategic national importance and it is necessary for the Local Plan to make appropriate provision for the continued adequate supply of the material. Demand for the mineral and the area's contribution to*

the national supply are expected to continue for the foreseeable future.

M20 - Peat Workings

The future extraction of peat from new sites will be restricted to areas which have already been significantly damaged by recent human activity and are of limited or no current nature conservation or archaeological value. The Council will continue to seek the voluntary revocation of planning permissions for peat extraction and will review and update all planning permissions for peat extraction in order to bring conditions up to a modern standard of operation and restoration.

15.48 *Mineral planning policy guidance on peat was issued for the first time as a draft MPG in September 1994. The main thrust of this is that there should be no new planning permissions granted for peat extraction outside existing areas with planning consent or already damaged by working and which have little or no nature conservation value. Sites within North Lincolnshire are the subject of a proposed SPA and would therefore be inappropriate for future working. In addition North Lincolnshire Council has signed the Peatlands Charter which commits the Authority to conserving the remaining peatland habitat. They are also of importance for nature conservation both locally and nationally.*

M21 - Oil and Gas Exploration Boreholes

Proposals for exploratory boreholes for energy minerals will be permitted, provided that:

- i) the site is located in the least environmentally sensitive part of the geological prospect;**

- ii) site selection has taken into account the potential for the borehole to be retained for longer term appraisal and development;**
- iii) adequate provision is made for short term mitigation of environmental impacts during borehole use;**
- iv) adequate provision is made at the implementation stage for further mitigation where appropriate, should the borehole be carried forward for appraisal use or become permanent;**
- v) adequate proposals are made for the restoration of the site at the end of the exploratory phase.**

The grant of planning permission for an exploratory borehole will not commit the Council to any subsequent grant of permission for appraisal or production related development.

15.49 *The drilling of test boreholes requires planning permission and the Council will have regard to the development control policies of the Local Plan in considering proposals. The development of test boreholes can involve a range of potential environmental impacts. The Council is supportive of onshore oil and gas exploration and, subject to the protection of the environment, will normally give favourable consideration to proposals for exploratory boreholes.*

M22 - Oil and Gas Appraisal Boreholes

Proposals for the drilling and testing of appraisal boreholes will be permitted, provided that:

- i) the applicant has demonstrated the likely extent of the geological structure to be appraised using the best available information;**
- ii) any additional boreholes will be located within this area;**
- iii) the proposed works are necessary to determine the quality, extent and characteristics of the deposit;**
- iv) adequate proposals are made for environmental protection during operation and restoration on completion.**

The grant of planning permission for appraisal and testing boreholes will not commit the Council to any subsequent grant of planning permission for oil and gas production related development.

15.50 *Where exploratory boreholes show that further appraisal is appropriate, more boreholes may be needed to test the extent of the geological structure involved and additional infrastructure may be required to support the appraisal. This additional development has the potential to create environmental impacts and to extend the working over a wider area. Consequently it is important that the likely extent of working is established and the implications can be assessed.*

M23 - Oil and Gas Production

Proposals for oil and gas production facilities will be permitted, provided that the proposal incorporates environmental protection measures that are adequate to mitigate the impacts arising from a long term or permanent site.

15.51 *Oil and gas production wells and associated infrastructure may originate as a result of the development and upgrading of an earlier exploration or appraisal borehole site or they may be developed on a new site following the conclusions of the appraisal stage. Where previous boreholes are developed for production purposes, the Council will wish to review the mitigation proposals submitted previously and where necessary will wish to see these improved, taking into account their effectiveness and the scale of the proposed development. Oil and gas production facilities can result in a requirement for long term or permanent sites. In such cases, it is important that adequate environmental protection measures are taken.*

Environmental Appraisal, Monitoring and Review

15.52 *The minerals policies and proposals of the Local Plan have been prepared on the basis of the information currently available. Geological information on the distribution of minerals within North Lincolnshire is incomplete, particularly in relation to the exact location, quality and quantity of the workable materials. Equally important is the potential impact of the Plans policies and proposals on the natural and historic*

environment. As further information becomes available it may be appropriate to amend some of the policies and proposals. Other factors such as changing economic conditions, accuracy of forecasting and alterations in national and regional planning policy may also have an effect.

- 15.53 In preparing the minerals policies and proposals of the Local Plan there is an inherent requirement to consider the longer term beyond the Plan period. This is important, both in order to place the planning for future mineral working in a wider temporal context and to best consider the sustainability of the Local Plan content. Adequate flexibility exists for operators to put forward proposals to extend existing sites in the shorter term where proven demand and need exist. However the position on new workings will need to be evaluated in conjunction with any re-examination of Government projections.