

Main Report

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1 Status and Use of Minerals Plan

1.1 The Greater Manchester Minerals Plan Development Plan Document forms part of the folder of individual development plans for the ten Greater Manchester councils. The councils are:

- Bolton Metropolitan Borough Council
- Bury Metropolitan Borough Council
- Manchester City Council
- Oldham Metropolitan Borough Council
- Rochdale Metropolitan Borough Council
- Salford City Council
- Stockport Metropolitan Borough Council
- Tameside Metropolitan Borough Council
- Trafford Metropolitan Borough Council
- Wigan Metropolitan Borough Council

1.2 When using the policies in the Plan it should be borne in mind that:

- The Minerals Plan is designed to be read as a whole, giving due consideration to all relevant policies
- The Minerals Plan should also be read in conjunction with the relevant adopted local planning policy
- National policy guidance also applies.

Status and Use of Minerals Plan

2 Aim and Objectives

This section sets out a Spatial Portrait of minerals considerations in Greater Manchester. The Plan's Aim, Objectives and Spatial Strategy are then derived from this.

Spatial Portrait

National Context

- 2.1** Minerals play an important role in the prosperity of the nation and the quality of life of its residents. They underpin the infrastructure for developing sustainable communities through the provision of an adequate and steady supply of materials to provide the infrastructure, buildings and goods that society, industry and the economy needs ⁽¹⁾.
- 2.2** However, managing the supply of minerals effectively and sustainably through the planning system also requires regard to be had to the resource requirements for future generations and the impact that minerals developments can have on local communities and the wider environment which include harmful emissions caused by road haulage and their effects on climate change.
- 2.3** National planning policy requires Mineral Planning Authorities (MPAs) to make provision for future mineral supply within their Local Development Frameworks (LDFs). The Minerals Plan has a role to play in this by providing a sound basis for planning for minerals in Greater Manchester.
- 2.4** To ensure continuing economic development, the Government proposes to secure energy supply through a mix of sources, including coal and gas (excluding peat). The Minerals Plan therefore makes provision for a mix of potential minerals based energy sources.
- 2.5** In addition, the latest national strategy for delivering sustainable development in the UK was launched in 2005 ⁽²⁾. This sets out a commitment to creating sustainable communities, whilst at the same time, tackling environmental inequalities. The priorities for action identified within the national strategy are:
- Sustainable consumption and production;
 - Climate change and energy;
 - Natural resource protection and environmental enhancement; and
 - Sustainable communities.

1 NPPF

2 <http://www.sustainable-development.gov.uk>

Aim and Objectives

- 2.6** Therefore, national policy requires the Greater Manchester Authorities to plan for minerals in a sustainable manner. The Greater Manchester Authorities have produced a sound planning policy framework that provides a clear guide to minerals operators and the public about:
- The locations where mineral extraction may take place;
 - The safeguarding of sensitive environmental features and of mineral resources with potential for future extraction; and
 - All aspects of environmental amenity and resource protection including the sustainable transportation of minerals.
- 2.7** This section explains the issues arising from winning/working minerals in Greater Manchester which the Plan addresses. It also provides details of which mineral resources are found in Greater Manchester.

Economic Activity and Minerals

- 2.8** Economic growth in Greater Manchester is a key priority to ensure its continued development. Minerals are an important resource and the maintenance of a steady supply of minerals is important to this growth because it will enable the continued economic growth and maintenance of the built environment and transport infrastructure. The Minerals Plan provides a framework to ensure a steady supply of minerals to meet requirements.
- 2.9** Mineral extraction is a temporary activity and, once sites are restored, they can enhance the local environment and landscape. It is important to the economy that Greater Manchester is an attractive place to live and visit, and quality minerals restoration and aftercare has a role to play in this. Therefore the role of the Minerals Plan is to ensure high quality restoration and aftercare.
- 2.10** Minerals are a finite resource and it is important that they are used in such a way that leaves sufficient supplies for the future, so that they play a continuing role in underpinning the growth of many sectors of the economy. The winning and working of minerals in Greater Manchester is not new, it has taken place for hundreds of years. As a result, the infrastructure to support it, such as rail heads, has been developed whilst other existing infrastructure, such as canals, could be used in the future. These are valuable assets for Greater Manchester which the Minerals Plan protects. Therefore, the aim of the Minerals Plan is to avoid the needless sterilisation of mineral resources and to protect existing minerals infrastructure.
- 2.11** The AGMA authorities are committed to sustainable development and aim to 'decouple' economic growth from higher levels of carbon emissions. The Minerals Plan promotes the use of secondary and recycled aggregates as an alternative to primary construction materials.

Planning policy reference and evidence base sources:

- *NPPF, GM Spatial Strategy, North West Sustainable Consumption and Production Action Plan (NW SCP)*
- *SA Scoping Report Objective(s) 1, 2, 3, 4, 7, 19*

Minerals and Local Effects - Environmental and Community

2.12 The environment of Greater Manchester is both naturally and historically rich and diverse. It ranges from upland moorland to a varied urban heritage, the result of early industrialisation. Although minerals can only be worked where they are found and extraction is a temporary activity, these characteristics provide a challenging context within which the Greater Manchester authorities must plan for future mineral development. Some areas will require protection from minerals development, such as sites designated (at national and local levels) for their biological, cultural, archaeological and heritage importance.

2.13 A further consideration is the impact of mineral extraction on local people. Whilst mineral extraction is necessary for the economy and the built environment, it is capable of introducing impacts to areas used for housing and employment, such as noise and dust pollution, increased traffic, etc. The control of these impacts is therefore an important consideration in future mineral development.

Planning policy reference and evidence base sources:

- *NPPF*
- *SA Scoping Report Objective(s) 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18*

Transport of Minerals

2.14 The quality of primary sand and gravel and crushed rock produced in Greater Manchester is relatively low and, where a higher quality of construction material is required, this must be imported. Greater Manchester relies on imports of high specification aggregates from quarries in North Wales, Derbyshire, Lancashire, Cumbria, Staffordshire and Cheshire. Materials are mainly transported by road, and to a lesser extent rail. Greater Manchester currently has 4 rail linked depots, two in Salford, one in East Manchester and one in Stockport. To ensure materials can still be transported this way, the Minerals Plan protects these depots.

2.15 There are no rail-linked quarries in Greater Manchester and, given the high cost of infrastructure and the low value of minerals, this situation is unlikely to change and minerals extracted from quarries within Greater Manchester will continue to be transported by road. Therefore the Minerals Plan ensures that the appropriate road network is used to transport minerals.

Aim and Objectives

Planning policy reference and evidence base sources:

- NPPF, GM Local Transport Plan, GM Freight Strategy, GM Spatial Strategy,
- SA Scoping Report Objective(s) 5, 6, 11, 15 & 17

Minerals in Greater Manchester

2.16 The main minerals worked, or with the potential for working, in Greater Manchester are:

- Construction aggregates;
- Natural building stone;
- Brick clay;
- Coal and unconventional gas resources; and
- Peat.

Construction Aggregates

2.17 Construction minerals include aggregates such as sand and gravel and crushed rock. The provision of aggregates is essential to the delivery of key infrastructure. The demand for such minerals will continue as Greater Manchester strives to achieve its growth agenda.

2.18 High specification aggregates are not found in Greater Manchester and must be imported. Given the associated costs of importing higher quality minerals into Greater Manchester, and the need to use minerals sustainably, it will be important to ensure that these are used for high-specification end uses. Conversely, it is important that lower quality mineral is available for low-specification end uses, such as bulk fill. Recycled aggregates can be used as a replacement for low-specification aggregate and the Minerals Plan provides for such opportunities for recycling facilities in Greater Manchester to be available.

2.19 Deposits of sand and gravel occupy areas where modern day river systems such as the Rivers Irwell and Mersey began to establish themselves following the retreat of the ice sheets some 10,000 years ago.

2.20 Crushed rock is obtained from older sandstone and gritstone deposits laid down during the Carboniferous Period ⁽³⁾ and which are found in the north and east of Greater Manchester.

3 Approximately 350 million years ago to 300 million years ago

- 2.21** The Greater Manchester authorities are required to provide for a sustainable supply of construction aggregates in order to accommodate the annual apportionment set out by the North West Aggregate Working Party (AWP), and to ensure the provision of a landbank for future needs. ⁽⁴⁾
- 2.22** The annual apportionment is shown in North West and Sub-regional Annual Aggregate Apportionment 2005-2020. Due to commercial confidentiality, the figures for Greater Manchester's apportionment are grouped together with Merseyside, Halton and Warrington (the 'sub-region'). The annual requirement for land-won sand and gravel production in the North West is 3.25 million tonnes per year. The annual requirement for land-won crushed rock in the North West is 9.63 million tonnes per year.

Table 1 North West and Sub-regional Annual Aggregate Apportionment 2005-2020

Aggregate	Regional apportionment (million tonnes)	Regional annual requirement (million tonnes)	Sub-regional apportionment (million tonnes)	Sub-regional annual requirement (million tonnes)
Crushed Rock	154	9.63	21.1	1.32
Sand and Gravel	52	3.25	6.86	0.43

- 2.23** There are four active quarries in Greater Manchester that produce crushed rock aggregate (Harwood, Montcliffe, Fletcher Bank ⁽⁵⁾, and Buckton Vale see Map 1 for details). Pilkington was recently granted planning permission. There is one active quarry in Merseyside producing crushed rock aggregate and one in Warrington. As the figures for Greater Manchester, Merseyside and Warrington are combined, it is not known to what extent Greater Manchester contributes to the sub-regional apportionment for crushed rock. In addition, not all the quarries which contribute to the crushed rock landbank figure are currently active (there are 3 inactive quarries in Greater Manchester see Map 1 for details), which means no aggregate is currently produced at those sites.

- 4 The minerals landbank is the sum, in tonnes, of all mineral reserves with planning permission. Managing the level of permitted reserves acts as a control on mineral production levels which helps to reduce the impact of mineral working but at the same time ensuring that there is a steady supply of materials into the economy.
- 5 Access from Bury, Greater Manchester to Fletcher Bank Quarry in Lancashire

Aim and Objectives

- 2.24** There are four active sand and gravel quarries in Greater Manchester (Pilsworth South, Morleys Hall, Offerton Sand and Gravel and Astley Moss-see Map 1). There are no active sand and gravel quarries in Merseyside, Halton and Warrington. Therefore, at present, only Greater Manchester contributes to this element of the sub-regional break down of the aggregate apportionment.
- 2.25** The Minerals Plan identifies the requirements that Greater Manchester needs to make to ensure an appropriate contribution towards the supply of primary aggregates within the North West and to maintain an adequate landbank for sand and gravel and crushed rock. This is particularly important because currently all the sub-regional sand and gravel extraction occurs in Greater Manchester and four of the six active quarries producing crushed rock in the sub-region are located in Greater Manchester.

Planning policy reference and evidence base sources:

- NPPF, NW SCP Framework
- SA Scoping Report Objective(s) 1, 2, 5, 7, 17, 19 & 20, AWP

Natural Building Stone

- 2.26** Sandstone resources within Greater Manchester are confined to a broad strip running north to south along the eastern margin of the Plan area, and east to west along the northern margin. The use of this material for building has declined in recent years however, there remains a demand for stone for conservation purposes and also for general building where new construction is to take place in the midst of older buildings or conservation areas. Although there is limited extraction of this material, the Minerals Plan recognises the importance of protecting sources of building stone for the maintenance and repair of historic buildings, as identified by England's Building Stone Pits (EBSPits) national database.

Planning policy reference and evidence base sources:

- NPPF, Mineral Extraction and the Historic Environment
- SA Scoping Report Objective(s) 3, 10, 12, 19

Brick Clay

- 2.27** Brick clays are essentially mudstones of different geological ages and compositions and are found extensively throughout Greater Manchester. Just one quarry in Greater Manchester produces brick clay for use in engineering and facing bricks (Harwood, Bolton). There are currently brickworks operated by Wienerberger in Denton and Cheadle, although the brickworks at Cheadle is currently closed. Both sites have in the past relied on imported clay, as well as clay supplied from sites in Greater Manchester including Pilsworth South Quarry in Bury, which was used at the Cheadle works, and Harwood Quarry in Bolton which is still used to supply the Denton works. However,

the main source for raw material for the Denton factory is from a quarry at Mouselow, Glossop, Derbyshire and reserves here are not sufficient to guarantee the 25 year supply required by NPPF.

- 2.28** The Minerals Plan therefore recognises the importance of ensuring a continued supply of brick clay to operations within Greater Manchester.

Planning policy reference and evidence base sources:

- NPPF
- SA Scoping Report Objective(s) 5, 19

Coal and Unconventional Gas Resources

- 2.29** Greater Manchester lies predominantly within the South Lancashire Coalfield. Coal seams are mainly present in the Pennine Lower and Middle Coal Measures. Greater Manchester's demand for energy is relatively high due to the size of the population and the various industries located here. Conversely, demand for coal in Greater Manchester itself is low because there are no coal fired power stations located within the conurbation. Nevertheless, the Minerals Plan should seek to set out the appropriate circumstances under which coal can be won.

- 2.30** Unconventional gas resources include coal bed methane, coal mine methane and shale gas. These gases can be used to generate energy and there is increasing interest in utilising these resources. The Minerals Plan identifies areas where there is likely to be the potential for the future extraction of unconventional gas resources.

Planning policy reference and evidence base sources:

- NPPF
- SA Scoping Report Objective(s) 17, 19, 20

Peat

- 2.31** The distribution of peat deposits is focused on the upland moorland areas to the north and east of Tameside, Oldham, Rochdale, Bury and Bolton. In addition, peat deposits occur in the low lying mosslands around Chat Moss to the south and west of the sub-region. Peat has a biodiversity and archaeological value and acts as a 'carbon sink'. Peat has been used for the past forty years as a growing medium enhancer for horticulture and gardening, however in more recent years substitute products have been developed which are starting to replace peat in this market. In Greater Manchester there are sufficient peat workings with planning permission to meet existing and future demand and no new planning permissions need be granted for new peat workings, however, a history of peat working has left some sites in need of restoration.

Aim and Objectives

- 2.32** Extraction of peat results in the loss of valuable habitats and the release of carbon dioxide into the atmosphere. It is a requirement of the EU Habitats directive to protect good quality sites and restore degraded ones. This will enable peat to act as a carbon sink. The Minerals Plan addresses these concerns and ensures they are taken into account through the planning process.

Planning policy reference and evidence base sources:

- *NPPF*
- *SA Scoping Report Objective(s) 3, 10, 11, 14, 17, 18, 19*

- 2.33** More details of mineral resources in Greater Manchester are given in Appendix Background information on minerals and Area of Search Methodology

Protecting Mineral Resources

- 2.34** The Greater Manchester Minerals Plan aims to meet the appropriate sub regional sand and gravel and crushed rock requirement. It also aims to ensure that other mineral resources are not needlessly sterilised by non mineral development. National Minerals Planning Policy indicates that because no suitable specific site allocations have come forward from landowners and developers during the production of the Minerals Plan, the Plan can only achieve these requirements through the identification of Areas of Search for sand, gravel and sandstone/gritstone and designation of Mineral Safeguarding Areas to protect mineral resources from needless sterilisation.
- 2.35** Areas of Search are areas, where knowledge of mineral resources may be less certain than specific mineral extraction site allocations, but within which planning permissions for particular sites could be granted to meet any shortfall in supply if suitable applications are made. Areas of Search are located within the much larger Mineral Safeguarding Area designations, which are based on the extent of the mineral resource excluding the urban area.
- 2.36** Mineral Safeguarding Areas are based on the known extent of a mineral resource, they are areas of known mineral resources that are of sufficient economic or conservation value to warrant protection for generations to come. The purpose of Mineral Safeguarding Areas differs from Areas of Search because the intention is to protect the resource from needless sterilisation and there is no presumption that the resources defined in Mineral Safeguarding Areas will be worked.

Aim

2.37 The above information has been used to develop the overall Aim and Objectives of the Minerals Plan. The Strategic Aim of the Minerals Plan is:

Aim

To provide a minerals spatial planning framework which takes into account the unique features of Greater Manchester. This framework will facilitate economic development, whilst ensuring that the environment and community are protected from the impacts of minerals developments in order to deliver a steady and sustainable supply of minerals, safeguard mineral resources, enable Greater Manchester to contribute to its sub-regional apportionment of aggregates and facilitate greater use of recycled aggregates and secondary mineral products.

Justification

2.38 The strategic Aim provides the overall focus and direction for the Minerals Plan and, along with the Objectives, is required for the effective delivery of the Minerals Plan. It has been developed through consultation with Stakeholders to reflect the evidence base and the particular circumstances of Greater Manchester as summarised in the Spatial Portrait. It sets out the position of the Minerals Plan in relation to other relevant national policies and strategies and commits the Local Planning Authorities in Greater Manchester to enabling an adequate supply of minerals and minerals related developments to come forward whilst safeguarding environmental assets and ensuring that residential amenity is not compromised. The Aim is supported by a set of strategic Objectives which seek to deliver the Aim.

Aim and Objectives

Objectives

2.39 The Objectives of the Minerals Plan are:

Objectives

1. To protect local communities and the natural and built environment including landscape from the impacts of minerals development. To enhance these assets and ensure the achievement of effective restoration (reclamation) recognising the potential positive impacts on biodiversity ⁽⁶⁾ once operations have ceased;
2. To safeguard potentially economically viable mineral resources and infrastructure from sterilisation, protect minerals related infrastructure and encourage the appropriate use of high quality materials;
3. To promote, where practicable, the sustainable transport of minerals;
4. To seek to provide a steady and adequate supply of minerals to meet Greater Manchester's needs through:
 - i. Contributing to the sub-regional apportionment of aggregates, including maintenance of appropriate landbanks;
 - ii. Identifying and protecting existing non-aggregate minerals; and
 - iii. Facilitating the re-use of secondary and recycled aggregates.
5. To support the development of local energy minerals (excluding peat) where required to supplement the energy mix nationally and regionally.

Justification

2.40 A strategic Aim and clearly defined Objectives are required for effective delivery of the Minerals Plan. The Objectives elaborate on the Aim by setting out a series of specific statements suitable for developing policies from and for monitoring to assess how well the Objectives of the plan are being met over time. They focus on the key minerals-related issues to be addressed by the Minerals Plan in order for the Aim to be achieved. They have been

6 "Reclamation" is used in MPG 7 to mean: operations which are 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 the former land use or for a new use "Reclamation" includes both restoration and aftercare as defined in the 1990 Act. However, it also includes events which take place before and during mineral extraction (e.g. correct stripping and protection of soils); and may also include operations after extraction such as filling and contouring or the creation of planned water areas.

developed through consultation with Stakeholders on the Minerals Plan and the production of the evidence base. They build upon, and are consistent with, relevant national and local policies/strategies.

- 2.41** The Objectives are supported by a monitoring framework (see Chapter Monitoring and Implementation) which is used to assess how well the Policies and subsequently the Objectives are being met over time. This will ensure that that Minerals Plan is measured to see how well it performs.

Spatial Strategy

- 2.42** Minerals can only be worked where they are found. Therefore, the key influence on the Spatial Strategy proposed in this Minerals Plan is the geology of the area, which constrains the freedom to develop a plan for minerals in Greater Manchester. Linked with this, another important consideration for the Spatial Strategy is the need to avoid the needless sterilisation of minerals by other forms of development.
- 2.43** A number of interrelated aspects of the evidence base, government advice, the Plan's Objectives and the views of Stakeholders are also reflected in the Spatial Strategy. It is not necessary for a planning application for mineral working to satisfy all four elements of the Spatial Strategy set out below, instead the elements of the Spatial Strategy should be balanced against each other, therefore a proposal for the winning and working of mineral resources would be required to meet one or more of these elements.
- 2.44** The Spatial Strategy aims to direct minerals development to places where there are opportunities to restore land beneficially, avoiding places with a sensitive natural or built environment or that are close to existing communities. These will be places that are accessible by sustainable modes of transport and close to both the existing highway network and the end user.
- 2.45** The Spatial Strategy takes on board the issues set out in the Spatial Portrait and reflects the Minerals Plan Aim and Objectives.
- 2.46** These aspects of the Spatial Strategy are outlined in more detail below.

Places where there are opportunities to restore land beneficially

- 2.47** Previous minerals activity in Greater Manchester, for example coal mining, has left a legacy of colliery spoil tips or land which may be in need of restoration. Where appropriate, minerals working that would secure the restoration of such areas will be supported.

Aim and Objectives

Places without a sensitive natural or built environment and away from existing communities

- 2.48** Although Green Belt is not an indicator of environmental quality, it does cover the part of Greater Manchester outside the urban area. The urban area is not generally compatible with mineral development and mineral extraction need not conflict with the purposes of including land in Green Belts. This means that in Greater Manchester, minerals extraction is likely to take place in the Green Belt.
- 2.49** There are a number of environmental and historical designations that will influence minerals development. Although minerals can only be worked where they are found and this may coincide with designated areas, the Minerals Plan should seek to protect areas of landscape, heritage and nature conservation value.
- 2.50** Minerals extraction has the potential to impact adversely on communities, for example through noise and dust. Therefore, the Minerals Plan recognises the importance of protecting local communities.

Places accessible by sustainable modes of transport and close to the existing highway network

- 2.51** Higher quality minerals will continue to be imported into Greater Manchester. The minerals plan recognises that to promote sustainable transport of minerals, new sites for wharfs and depots could be required. It is also important to maintain the sustainable transport links located within the urban area so that minerals can be brought to where they are needed.
- 2.52** However, this infrastructure is expensive to install and may not be economically viable for small operations. Therefore the Minerals Plan will consider the need to identify opportunities for rail and canal linked sites around existing wharfs and depots and known planned future developments. It also takes into consideration the suitability of the road network to accommodate minerals related traffic.

Places close to the end user

- 2.53** Another influence on where mineral extraction can take place is the value of the mineral compared with the distance travelled: it is not economically viable to transport low value minerals over long distances and so extraction will need to take place close enough to the end user to remain viable. This is particularly relevant for aggregate extraction in Greater Manchester as these are generally low quality.
- 2.54** Chapters 3- 5 contain a range of policies to deliver the overall aim and objectives of the Minerals Plan in a manner consistent with the Plan's spatial strategy.

Methodology

- 2.55** The Spatial Strategy for minerals was initially developed based on a number of interrelated aspects of the evidence base, government advice, the Plan's Objectives and the views of Stakeholders. A key influence is that minerals can only be worked where they are found. Map 2a in Appendix 2 (Maps) shows how the Areas of Search allocated in the Minerals Plan will help to deliver this spatial approach. Other considerations influencing the spatial strategy (avoiding sensitive environmental features and communities) are incorporated within the methodology used to identify Areas of Search.

Aim and Objectives

3 Policies

- 3.1** This section sets out the policy approach to working each of the minerals found in Greater Manchester. The first consideration is the possible impact of mineral developments on communities and the environment. The other policies cover construction minerals; natural building stone; brick clay; coal; unconventional gas resources; and peat. The approach taken within these policies reflect the Aim and Objectives and are related to the Spatial Strategy. Additional information on the mineral resources found in Greater Manchester is set out in Appendix Background information on minerals and Area of Search Methodology.

The Presumption in Favour of Sustainable Minerals Development

Policy 1

The Presumption in Favour of Sustainable Minerals Development

In line with the presumption in favour of sustainable development set out in the National Planning Policy Framework positive consideration will be given to minerals development which accords with the policies set out in this document and with all other relevant local plan (Local Development Framework) policies. Such development will be considered to be sustainable and will be permitted unless other material considerations indicate otherwise.

Policies

Key Planning and Environmental Criteria

Policy 2

Key Planning and Environmental Criteria

All proposals for minerals working or the provision of minerals infrastructure will be permitted where any adverse impacts on the following criteria is avoided or can be appropriately mitigated:

1. Controlled waters and flood risk management;
2. Landscape and visual intrusion;
3. Biological and geological conservation including European sites;
4. Historic environment and built heritage;
5. Best and most versatile agricultural land
6. Infrastructure
7. Traffic and access;
8. Amenity e.g noise, dust, vibration, and odours;
9. Air Quality
10. Land instability;
11. Potential land use conflict;
12. Design, phasing and operational details;
13. Aviation safety.

Justification

- 3.2** The criteria included in the policy are the most frequently encountered planning and environmental considerations in the assessment of mineral working proposals.
- 3.3** In line with Objective 1 of this Plan, this policy ensures that all proposals for minerals working or the provision of minerals infrastructure will both protect and enhance local communities and the environment in line with the thirteen key considerations.
- 3.4** Applicants are expected to submit information including but not restricted to the criteria within this policy. Each Local Authority has their own Development Management checklist which should be used as the basis for preparing information to support a mineral related planning application.

Aggregates

- 3.5** Aggregates are granular material used in construction and are essential in the construction of new buildings and maintenance of the built environment. They are used in concrete, roadstone, asphalt and numerous other construction materials; because of this, aggregates are essential to Greater Manchester's economy.

Secondary and Recycled Aggregates

- 3.6** Secondary and recycled aggregates can be used as alternatives to primary aggregate and have a number of benefits, including the reuse of waste materials and reducing the impact of primary extraction. A range of materials can be used as recycled aggregate, for example, crushed glass or reclaimed asphalt. More information on this can be found at <http://aggregain.wrap.org.uk/>. The Greater Manchester Authorities have identified sites for recycling construction and demolition waste through the Joint Waste Plan ⁽⁷⁾.

Primary Aggregates

- 3.7** Primary aggregates are materials that are directly extracted from the ground. Sand and gravel is material that has already been broken into smaller pieces by natural processes. The other type of primary aggregate is crushed rock aggregate, which is when hard rock ⁽⁸⁾ is quarried from a rock face and then broken down into smaller pieces.
- 3.8** National aggregates policy is set out by the Government in National Planning Policy Framework (NPPF). NPPF requires Minerals Planning Authorities to make provision for the sub-regional apportionment of the current National and Regional Guidelines for land-won aggregate. Greater Manchester shares its apportionment with Merseyside, Halton and Warrington (the 'sub-region').
- 3.9** The regional apportionments also include a calculation of an assumed level of alternative aggregate use which is accounted for in the sub-regional apportionment.
- 3.10** Appendix 1 'Background information on minerals and Area of Search Methodology' provides detailed information about the sub-regional apportionment and the implications of this for future aggregate provision in Greater Manchester. In summary, it is likely that there will be a need to replace existing reserves of sand and gravel as they become depleted over the Plan period. Although there is currently a sufficient crushed rock

7 See www.gmwastedpd.co.uk for further information on the Greater Manchester Joint Waste Plan

8 In Greater Manchester this hard rock would be sandstone/gritstone

Policies

landbank, as quarries become depleted over the plan period there will be a requirement to replace aggregate resources to meet the demands of construction markets.

- 3.11** Geographical imbalances in the occurrence of natural aggregate resources and areas where they are needed have, for over 35 years, been met through the Managed Aggregate Supply System (MASS). Following recent changes to the planning system, the Government recognises the need to maintain MASS but, in keeping with its principles for a more localist approach to planning, will decentralise more power to MPAs to determine appropriate extraction levels (a 'bottom-up' approach). This means that mineral planning authorities should now plan for a steady and adequate supply of aggregates by preparing an annual Local Aggregates Assessment.
- 3.12** The Greater Manchester Authorities are working with Warrington, Merseyside and Halton, to prepare a LAA. They are working together because information on sales from quarries in these authorities has historically been amalgamated due to commercial confidentiality. The LAA will be based on a rolling average of 10 years sales data and other relevant local information, as set out in paragraph 145 of NPPF.
- 3.13** The Minerals Plan has used the apportionment method to assess future requirements for aggregates. However, Greater Manchester (with Warrington, Merseyside and Halton) have not met the annual apportionment for a number of years, since the downturn in the economy. It is therefore likely that under the LAA, the landbank may increase slightly.
- 3.14** The following tables are inserted to indicate the future requirement for sand and gravel (Table 2) as well as crushed rock 2005-2020 (Table 3). Both tables include the total requirement for sand, gravel and crushed rock within this apportionment period.

Table 2 Future Requirement for Sand and Gravel

Total requirement (2005-2020)	Annual requirement (million tonnes)	Requirement to end of plan period 2009 - 2027 (years)	Requirement beyond 2027 (years)	Total requirement to maintain landbank (years)	Total reserves required to maintain 7 year rolling landbank (million tonnes)
6.86 million tonnes	0.43	18	7	25	10.75

Table 3 Future requirement for crushed rock

Total requirement (2005-2020)	Annual requirement (million tonnes)	Requirement to end of plan period 2009 - 2027 (years)	Requirement beyond 2027 (years)	Total requirement to maintain landbank (years)	Total reserves required to maintain 10 year rolling landbank (million tonnes)
21.1 million tonnes	1.32	18	10	28	36.96

- 3.15** There are three routes by which the Minerals Plan is able to identify future minerals development: Specific Sites, Preferred Areas and Areas of Search. Despite four 'call for sites' exercises, no suitable Specific Sites or Preferred Areas for future aggregate development have been identified. Therefore, the Minerals Plan only identifies Areas of Search for sand, gravel and sandstone/gritstone, which are broad areas within which there may be particular sites which could meet any shortfall in supply.
- 3.16** Map 2 shows the Areas of Search for sand, gravel and gritstone. The methodology setting out how the Areas of Search have been developed is set out in Appendix 1 'Background information on minerals and Area of Search Methodology'.
- 3.17** Planning applications for primary aggregates extraction within and outside Areas of Search will be guided by Policy 3 Primary Extraction of Minerals - Aggregates, and will be required to provide information as set out under Key Planning and Environmental considerations in the same policy.

Policy 3

Primary Extraction of Minerals - Aggregates

Aggregate Extraction within Areas of Search

Applications for the extraction and/or processing of sand, gravel or sandstone/gritstone within the Areas of Search identified on Map 2 within this Plan will be permitted where:

1. The mineral is required to meet the required landbank of:
 - i. at least 7 years for sand and gravel; or
 - ii. at least 10 years for crushed rock; and
2. The site contains adequate resources of the mineral, in terms of quality and quantity for extraction to take place;
3. The proposal is in accordance with the Key Planning and Environmental Criteria in Policy 2;

Aggregate Extraction Outside Areas of Search

Planning permission will be permitted for the extraction of aggregates outside Areas of Search provided that:

4. The developer can provide evidence to support the need for departure from the Areas of Search identified: and
5. The location accords with the Plan's Spatial Strategy; and
6. The proposal meets the requirements of 1 to 3 above.

Justification

- 3.18** The Areas of Search set out in Map 2 could contribute to meeting any shortfall in provision during the Minerals Plan period should a suitable planning application be made.
- 3.19** NPPF requires Mineral Planning Authorities to make provision for the sub-regional apportionment of crushed rock and sand and gravel. By identifying Areas of Search for aggregates, the Minerals Plan identifies the need to meet any shortfall in provision.
- 3.20** In determining applications for mineral working, the Mineral Planning Authority will consider whether a buffer zone should be established between the mineral development and neighbouring uses.

- 3.21** The EU Mining Waste Directive covers the management of waste from land-based extractive industries. The Directive's key objective is to provide: *"...for measures, procedures and guidance to prevent or reduce as far as possible any adverse effects on the environment, in particular water, air, soil fauna and flora and landscape, and any resultant risks to human health, brought about as a result of the management of waste from the extractive industries."* The main requirements are transposed into English law through The Environmental Permitting (England and Wales) (Amendment) Regulations 2009.
- 3.22** Individual applications for minerals extractions should be referred for possible Habitats Regulations Assessment as part of the development management process so that appropriate mitigation for any damaging impacts can be implemented.
- 3.23** Although Areas of Search have been identified in the Minerals Plan to help meet sub regional requirements for aggregates, changes in economic viability, demand for minerals, technologies for the extraction or processing of minerals and improvements in data on minerals can all result in the need to consider sites outside these areas. In addition, as no suitable specific sites have been brought forward in the Minerals Plan, Greater Manchester will be reliant on Industry to bring forward mineral proposals to help meet our sub-regional apportionment of aggregate, and as such proposals outside the Areas of Search may offer the best potential to meet this need.
- 3.24** It is therefore possible that over the lifetime of the Minerals Plan, applications will be submitted outside the Areas of Search for mineral development. This policy ensures a flexible approach to minerals planning, allowing future minerals developments to be appropriately located, whilst considering any applications against national and local policies.
- 3.25** Proposals for Mineral development located outside the Areas of Search are expected to fit within the Minerals Plan Spatial Strategy. All Areas of Search proposed during the preparation of the Minerals Plan were assessed against the Key Environmental and Planning Criteria listed in Policy 2 and proposals for all mineral developments outside Areas of Search will be expected to meet the same criteria. Information on the Spatial Strategy can be found in section 2 of this Plan.
- 3.26** Any mineral development that would adversely affect a significant water resource or its dependents should only be allowed to proceed if the adverse impact is either agreeable to the MPA and Environment Agency as a statutory consultee or adequately mitigated. This would be a matter of site specific assessment and covers both surface water and groundwater resources. In the Greater Manchester Area, there are numerous abstractions for water supply made from a variety of aquifers, including the Permo-Triassic and Carboniferous age sandstones and siltstones, and to a lesser degree from superficial deposits. Surface water flows and abstractions from them can

Policies

also be affected. The extent to which mineral exploitation may affect any of these dependencies is heavily controlled by the proposed depth, extent and duration of proposed working compared to the depth of the abstraction point and extent and relative water levels of the aquifer concerned. The potential impact can therefore only be assessed by site specific risk assessment on a case-by-case basis. Sometimes, but not always, some form of protective mitigation or provision of an alternative source of supply may be possible.

Natural Building Stone

- 3.27** NPPF requires the Minerals Plan to consider whether there are any important sources of building and roofing stone that should be safeguarded from other forms of development and whether there is a local, regional or national need for certain building and roofing stones for the conservation and restoration of the historic built environment.
- 3.28** The Minerals plan is also required to consider situations where new construction is to take place in the midst of older buildings constructed of a certain stone, for example in some conservation areas, where the construction of new buildings necessitates the use of materials already used in existing buildings.
- 3.29** To determine the need for safeguarding building and roofing stones for conservation and restoration purposes, the Minerals Plan has accommodated information from the new database England's Building Stone Pits (EBSPits). This database of the many building and roofing stones used in England has been established as part of the 'English Heritage BGS Strategic Stone Study', which seeks to help the identification of active and disused stone quarries that are of importance to historic buildings.
- 3.30** Notwithstanding the information resulting from the Strategic Stone Study, The National Trust responded at Issues and Options stage that it had not identified any sites within Greater Manchester that provide stone for heritage purposes that it relies on, or knows about. This confirms information from local conservation officers who suggest that much of the stone for conservation area paving and heritage projects in Greater Manchester is obtained from a quarry in Yorkshire. Nevertheless, the Plan takes a flexible approach to the supply of local building stone.
- 3.31** Applications for the extraction of natural building stone are required to comply with the following policy.

Policy 4

Natural Building Stone

Proposals for the working of natural building stone will be supported provided that this would assist the conservation and repair of historic buildings or structures built of the same or similar materials, or new construction where the use of building stone is specified.

Proposals must be supported by evidence that:

1. The stone to be worked will be used in a specific conservation project, or
2. The material makes a significant positive contribution to the character of the building, structure or area in which the development is proposed, and
3. The proposal is in accordance with the Key Planning and Environmental Criteria in Policy 2.

Justification

3.32 Information on stones used for historic buildings has been established as part of the English Heritage BGS Strategic Stone Study, in using this information the Plan takes a flexible approach to the supply of building stone because of the ad hoc nature of demand and the variable nature of the resource. Natural building stone could be required for the repair and maintenance of existing buildings, for example historic buildings. It could also be required for new constructions where there is a need to match the new building to its surroundings.

Non Aggregate Minerals

Brick Clay

3.33 There are two brickworks in Greater Manchester but these primarily rely on imported clay. At the current time, clay production in Greater Manchester is limited to Harwood Quarry in Bolton. There are clay resources across Greater Manchester but there is no evidence at this time to suggest interest in extracting it. However, should proposals for clay extraction in Greater Manchester come forward, applicants would be required to comply with Primary Extraction of Minerals - Non-Aggregate

Coal

3.34 NPPF requires the development of coal resources to take place in accordance with the best balance of community, social, environmental and economic interests and the principles of sustainable development. It is for the Mineral Planning Authority to determine the acceptability of individual projects, observing the policies and procedures outlined in NPPF.

Policies

- 3.35** NPPF indicates that, in applying the principles of sustainable development to coal extraction, whether opencast or deep-mine, and to colliery spoil disposal, there should normally be a presumption against development unless the proposal would meet the following tests:
- i. Is the proposal environmentally acceptable, or can it be made so by planning conditions or obligations?
 - ii. If not, does it provide local or community benefits which clearly outweigh the likely impacts to justify the grant of planning permission?
- 3.36** Proposed coal extraction in other areas, such as the Green Belt or Sites of Special Scientific Interest, must meet additional tests as set out in NPPF.
- 3.37** In line with NPPF, the Minerals Plan indicates areas where coal extraction may be acceptable in principle subject to the Key Planning and Environmental Criteria as set out in Policy 2 and other relevant policies in the Local Development Framework being met. The extent of the shallow coalfield, based on information prepared by The Coal Authority, and the constraints within that area are identified on Map 3. It is considered that the policy context set out by National Policy and supported by the Development Management Policies in Chapter Development Management and Primary Extraction of Minerals - Non-Aggregate of this Plan are adequate to cover the consideration of any applications for coal extraction.
- 3.38** Any proposals for coal extraction will be determined on a case-by-case basis using the policies within the Minerals Plan, relevant Core Strategy and other relevant national and local planning policy.
- 3.39** There are a number of impacts associated with surface coal extraction, for example, on landscape and amenity. Determining applications for coal extraction on a case-by-case basis will enable the specific social, environmental and economic impacts relating to that site to be taken into account. All applications for such development should be considered against Policy 2.
- 3.40** The following policy details how proposals for the primary extraction of non-aggregate mineral should be addressed.

Policy 5

Primary Extraction of Minerals - Non-Aggregates

Proposals for the development of non-aggregate minerals will be permitted where the location accords with the Plan's Spatial Strategy and:

1. The proposal is in accordance with the Key Planning and Environmental Criteria in Policy 2; and
2. There are adequate resources on site of the mineral in terms of quality and quantity for extraction to take place

Justification

- 3.41** No specific sites for development of non aggregate minerals have been identified as part of the consultation exercised undertaken on the Minerals Plan to date but it is possible that over the lifetime of the Plan applications will come forward on unallocated sites. Policy 5 ensures that due consideration can be given to any such planning applications.
- 3.42** Proposals for Mineral development on unallocated sites are expected to fit within the Minerals Plan Spatial Strategy. Information on the Spatial Strategy can be found in Section 2 of the Plan.
- 3.43** In determining applications for mineral working, the Mineral Planning Authority will consider whether a buffer zone should be established between the mineral development and neighbouring uses.
- 3.44** The EU Mining Waste Directive covers the management of waste from land-based extractive industries. The Directive's key objective is to provide: "...for measures, procedures and guidance to prevent or reduce as far as possible any adverse effects on the environment, in particular water, air, soil fauna and flora and landscape, and any resultant risks to human health, brought about as a result of the management of waste from the extractive industries." The main requirements are transposed into English law through The Environmental Permitting (England and Wales) (Amendment) Regulations 2009.
- 3.45** Individual applications for mineral extraction should be referred for possible Habitats Regulations Assessment as part of the development management process so that appropriate mitigation for any damaging impacts can be implemented.
- 3.46** Any mineral development that would adversely affect a significant water resource or its dependents should only be allowed to proceed if the adverse impact is either agreeable to the MPA and Environment Agency or adequately

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mitigated. This would be a matter of site specific assessment and covers both surface water and groundwater resources. In the Greater Manchester Area, there are numerous abstractions for water supply made from a variety of aquifers, including the Permo-Triassic and Carboniferous age sandstones and siltstones, and to a lesser degree from superficial deposits. Surface water flows and abstractions from them can also be affected. The extent to which mineral exploitation may affect any of these dependencies is heavily controlled by the proposed depth, extent and duration of proposed working compared to the depth of the abstraction point and extent and relative water levels of the aquifer concerned. The potential impact can therefore only be assessed by site specific risk assessment on a case-by-case basis. Sometimes, but not always, some form of protective mitigation or provision of an alternative source of supply may be possible.

Unconventional Gas Resources

- 3.47** Unconventional gas resources are those which cannot be extracted using standard drilling techniques. The gas itself is the same as other forms of natural gas and could provide both industrial and domestic power. It has the potential to be an important new source of energy for the UK. The continuing decline in natural gas from the North Sea means that unconventional gas is likely to become an increasingly attractive alternative potential source of gas.
- 3.48** In Greater Manchester, unconventional gas resources are likely to include coal bed methane (CBM) and coal mine methane (CMM). They may also include shale gas. Paragraph 147 of NPPF sets out the Government's approach to on-shore gas (including gas from coal) in relation to its energy policy and encourages the capture of methane from coal mines where environmentally acceptable. The extraction of shale gas is a relatively new and emerging technology and is not included in NPPF.
- 3.49** CBM is the generic name given to gases produced during the process of coal formation which are either absorbed onto the coal or dispersed into pore spaces around the coal seam. The occurrence of CBM in Greater Manchester corresponds with the location of coal seams. Extraction of CBM can be contemplated at depths of 200-1500m. Petroleum Exploratory Development Licenses (PEDL) covering Salford, Trafford, Manchester and Wigan have been granted by the Department of Energy and Climate Change to energy companies. This is an onshore licence covering oil and gas resources. Planning permission was granted in 2010 for exploratory drilling in Salford and an application for exploration and extraction of CBM was permitted by Trafford MBC in September 2010.
- 3.50** CMM is produced when methane escapes from coal seams during the working of mines. This gas is not currently mined in Greater Manchester but given the history of coal mining in the area, former mines could offer potential for working.

- 3.51** Shale gas is associated with shale rock and its extraction uses new technologies. Drilling depths can be deeper than associated with CBM extraction. Permission was granted in Lancashire for exploratory drilling of shale gas and the Greater Manchester Minerals Plan includes this resource as the potential for extraction may also exist in Greater Manchester.
- 3.52** The following constraints (shown in Map 8 and Map 9) are likely to affect any proposed production and processing sites within those areas:
- International and national environmental designations; and
 - International and national heritage designations.
- 3.53** Impacts associated with unconventional gas extraction include noise and vibration from drilling. Particular attention should be given to the abstraction of groundwater and its impacts, as well as the disposal of water produced during well stimulation and gas production. As the industry's knowledge of extraction techniques develops new technologies for the extraction of gas resources will come forward. The PEDL area includes lowland raised bog, which is a UK Priority Habitat. Any drilling and extraction of unconventional gas resources should not have any impact on either the hydrology or air quality within this area.
- 3.54** Applicants would be expected to submit information including, but not restricted to, that which is set out in a list of key environmental and planning criteria in Policy 2.
- 3.55** Following on from any borehole drilling required at the exploratory phase, the infrastructure required at the extraction stage could include that required for on site electricity generation (small, temporary compound) and a road. The exact location of this infrastructure could be flexible because boreholes can be drilled obliquely. Electricity can be generated onsite and connected to the grid.
- 3.56** The granting of planning permission for exploration and appraisal of unconventional gas opportunities does not include the presumption that long term production from those wells, or the development of further wells, will be permitted. Options for further development of the area should be presented as part of the initial planning application to enable the Mineral Planning Authority to consider the potential long term environmental impacts of the development.
- 3.57** Planning applications within the extent of the coalfield set out in Map 3 will be required to comply with following policy.

Policy 6

Unconventional Gas Resources

Applications for exploration and appraisal, and production wells for unconventional gas resources will be permitted where the applicant can demonstrate that the proposal:

1. Is in accordance with the Key Planning and Environmental Criteria in Policy 2; and
2. Includes options for the next stage of extraction, following exploration; and
3. Includes detailed plans for removal of all equipment and restoration of the site in accordance with a scheme and to a standard approved by the Mineral Planning Authority.

Justification

- 3.58** The purpose of this policy is to ensure that proposals for exploration and appraisal and production wells for unconventional gas opportunities are appropriately situated and sufficient information on all stages of working is provided. Applicants must provide sufficient information to allow full consideration of any significant adverse impacts and details of mitigation for all unconventional gas resource development.
- 3.59** NPPF requires the Minerals Plan to identify the extent of the coalfield at depths below the surface of between 200 - 1500m and of areas which are licensed for coal bed methane extraction by the Department for Energy and Climate Change (DECC) under PEDL. The Minerals Plan is also required to list the principal constraints likely to affect any proposed production and processing sites within those areas. Information set out in Restoration and Aftercare deals in more detail with restoration.
- 3.60** Information from industry indicates that unconventional gas resources could potentially be extracted from a wider area than indicated by the PEDL. As knowledge in this sector grows and technologies improve, it may become possible to extract from underneath previously worked areas. Therefore map 3 identifies the full extent of the coalfield in order to show where future extraction could potentially take place.
- 3.61** The impacts referred to in this policy are listed in Policy 2 as Key Planning and Environmental considerations.
- 3.62** Restoration including final landuse and ground levels should be set out within a restoration scheme and approved by the Local Planning Authority. The preparation of this scheme should have regard to relevant considerations

including Local Development Documents, Restoration and Aftercare and specific site conditions. Local Planning Authorities will seek to gain environmental improvements through Planning Gain as appropriate.

Peat

- 3.63** Peat has been used for the past forty years as a growing medium enhancer for horticulture and gardening. In recent years substitute products have been developed which are proving increasingly attractive to the amateur and commercial grower.
- 3.64** Extraction of peat results in the loss of valuable habitat and the release of carbon dioxide into the atmosphere. It is a requirement of the EU Habitats Directive to protect good quality sites and restore degraded ones. This will enable peat to act as a carbon sink.
- 3.65** Peat extraction is focused in the Salford and Wigan areas of Greater Manchester. In the recent past peat has been worked at three sites;
- Little Woolden Moss with a planning permission running to 2042;
 - Chat Moss where permission expired in 2010; and
 - Astley Moss which is due for completion in 2015.
- 3.66** Defra published a 'Consultation on reducing the horticultural use of peat in England' in December 2010. This continues the policy trend of seeking to reduce peat use. It recognises both the important commercial role peat has to play within the horticultural industry and its environmental role as an important ecosystem for wildlife and carbon sink. With both these considerations in mind the consultation paper sought views on the elimination of peat from the amateur horticultural market by 2020 and the feasibility of phasing out peat from the commercial sector by 2030. It argued that no planning permissions be granted for new peat workings. Following this consultation Defra set out plans for reduction in peat use and confirmed the 2030 ambition for zero peat use in the Natural Environment White Paper.
- 3.67** The White Paper also announced the creation of a peat task force to explore how to overcome barriers to further reducing peat use in horticulture. This has broadened its remit to that of putting the horticultural sector on a long-term sustainable footing by ensuring that all of the growing media (or substrate) used in horticulture is sustainable. To reflect this change of emphasis, it is now operating under the working title of the Sustainable Growing Media Task Force.
- 3.68** The 2007 Panel Report for the North West Regional Spatial Strategy indicates that there are sufficient peat workings with planning permission to meet existing and future demand and no planning permissions need be granted for new peat workings.

Policies

- 3.69** The National Planning Policy Framework does not identify peat as a 'mineral resource of local and national importance' and requires that Local Planning Authorities do not identify new sites or extensions to existing sites for peat extraction.
- 3.70** There are two main local issues relating to peat resources in Greater Manchester:
- 3.71** Firstly the need to restore areas of degraded lowland bog arising from previous peat working. With this issue in mind the Greater Manchester Minerals Plan complements the National Planning Policy Framework and the strategic background both of which point to the need for no further planning permissions to be granted for new peat workings. The Plan therefore addresses the local issue of restoration.
- 3.72** Secondly, there are areas of peat resources in Tameside and Trafford, which have either already been built upon, are the subject of valid planning permissions for non-minerals development or are the subject of future non-minerals development aspirations supported by the Local Planning Authority. These areas are not the focus of Policy 7 as future development at these locations is not considered as mineral working nor is it likely to impact upon peat resources which could be restored to lowland bog habitat as supported by the EU Habitats Directive.
- 3.73** In line with the requirements of the National Planning Policy Framework the Minerals Plan does not include a Mineral Safeguarding Area for peat resources.

Policy 7

Peat

Planning permission for peat extraction will only be granted where:

1. The site has been previously worked for peat; and
2. The removal of peat is physically required to facilitate restoration and only peat physically required to implement that restoration is removed; and
3. The site is to be restored to lowland raised bog;

Justification

- 3.74** To protect and enhance the environment and reflect the requirements of the EU Habitats Directive. In recognition of the adequacy of supply in the North West of England and the requirements of the National Planning Policy Framework.

- 3.75** By 'restoration' this policy means the upgrading or enhancement of degraded areas to a viable state capable of supporting traditional lowland bog ecosystems and habitat. Evidence for this must be provided by the applicant in support of any planning application.
- 3.76** The policy will be implemented in response to future planning applications, through the Review of Old Planning Permissions (ROMP) process, when opportune, and site monitoring. Restoration and Aftercare deals in detail with the restoration of sites.

Wharfs and Depots

- 3.77** High quality material for road surfacing and concreting is known to be imported into Greater Manchester from quarries in North Wales, Derbyshire, Lancashire, Cumbria, Staffordshire and Cheshire. The quality of the imported materials is higher than those found in Greater Manchester and they have different end uses. Therefore, there will continue to be a need to import them.
- 3.78** Minerals are generally imported into Greater Manchester by road and to a lesser degree by rail. There are a number of known rail linked aggregate depots in Greater Manchester, including two in Salford and one east of Manchester City Centre. No new rail-linked depots have been nominated through the Minerals Plan. The Manchester Ship Canal has the potential to be used for the transportation of minerals, possibly to support the concept of a 'virtual quarry', where minerals are stored prior to onward transfer but no Specific Sites have been nominated at this stage.
- 3.79** The Minerals Plan encourages sustainable transport of minerals through Sustainable Transport of Minerals and safeguards existing wharfs/rail-linked depots through Protecting existing mineral sites/infrastructure. However, planning considerations for new minerals-related wharfs and depots will be the same as for other wharfs and depots. Therefore, applications for new wharfs and depots will be assessed against relevant Development Management policies within the Core Strategy and other relevant Development Plan Documents.

Other minerals development (Coating Plants, etc.)

- 3.80** National policy requires the Minerals Plan to identify and safeguard sites, including rail and water-served depots for concrete batching, the manufacture of coated materials, other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material.
- 3.81** The Highways Agency have confirmed that they are not aware of a need for additional facilities that produce coated road stone.
- 3.82** There has been no indication that additional sites will be required for batching or handling, processing and distribution of secondary aggregate material during the Plan period.

Policies

- 3.83** Facilities for the handling, processing and distribution of recycled aggregates have been dealt with through the Greater Manchester Waste Plan.
- 3.84** Therefore the Minerals Plan does not identify future sites for other minerals development but existing facilities are safeguarded through Protecting existing mineral sites/infrastructure.

4 Mineral Safeguarding Areas

Protecting Greater Manchester's mineral resources from other forms of development

4.1 This chapter sets out how Greater Manchester's mineral resources will be protected from sterilisation by other non mineral development through the designation of Mineral Safeguarding Areas (MSAs). The consultation on 'Defining Mineral Safeguarding Areas in Greater Manchester (2010)' identified the extent of mineral resources in Greater Manchester in line with the British Geological Society (BGS) good practice guide "A Guide to Mineral Safeguarding in England (2007)".

Background

4.2 National policy guidance requires Mineral Planning Authorities to safeguard mineral resources that are or may become of economic importance by including them in a Mineral Safeguarding Area. The aim is to ensure mineral resources are adequately and effectively considered in land use planning decisions, to ensure they are not needlessly sterilised by non mineral development. It does not automatically preclude other forms of development; the intention is to alert prospective developers to the existence of mineral resources, so that they can be taken into account at the earliest possible stage of a development project. There is no presumption that permission will be granted for mineral development within a Minerals Safeguarding Area.

4.3 Opportunities for extraction of primary minerals are limited to their physical location and safeguarding such primary resources through the definition of a Mineral Safeguarding Area is considered necessary. Without safeguarding, the availability of locally sourced minerals could be exhausted over time which would increase the cost of development and regeneration. Prior extraction of minerals can have the following benefits:

- use on-site;
- use/stockpiling elsewhere for future use (such as brick clays or natural building stone);
- to support a land remediation or stabilisation scheme, and/or
- to help conserve features important to Greater Manchester's geological heritage.

4.4 Greater Manchester has the following mineral resources which are either currently of economic importance or have the potential to become important in the future:

- Glaciofluvial sand and gravel

Mineral Safeguarding Areas

- Carboniferous Millstone Grit (sandstone)
- Brickclay with Surface Mined Coal (Shallow Coal) ⁽⁹⁾

4.5 Mineral safeguarding Areas have been identified for each of the above. However, following the consultation on Defining Mineral Safeguarding Areas and responses to the Preferred Approach, the MSA's has been drawn to exclude the urban area as defined by each district. The reasons for doing so are set out below.

- Applying the MSA based on the geological occurrence of minerals only would cover almost the entire area of Greater Manchester;
- There have been limited examples of extraction taking place in the urban area in Greater Manchester, with no examples of coal or brickclay;
- Identifying the full extent of the resources available may place onerous requirements on developers and Councils to provide/assess data on mineral resources when applications for non-minerals development are made in the urban area when the encouragement of regeneration and economic development is one of Greater Manchester's priorities. Excluding the urban area and allowing proposals to be considered as they happen removes this burden;
- Prior extraction could result in delay to essential development in the urban area;
- The policy in no way prevents the extraction of minerals, in appropriate circumstances, in the Greater Manchester urban area.

Application of the Mineral Safeguarding Area

4.6 Although MSAs exclude the Urban Areas, Policy 8 allows for Prior Extraction of Minerals to be considered outside the MSAs. This would enable all developments where there is the potential for prior extraction to be considered against the same criteria.

4.7 As a result of excluding the urban area from the Mineral Safeguarding Area, the safeguarded area remaining largely coincides with the Greater Manchester Green Belt and adjacent areas of open land that sit outside the urban area. Even within this smaller safeguarded area there are a range of circumstances in which prior extraction of minerals will be inappropriate. These could relate to the quality or value of the minerals present, their absence from the site, the nature of the development and the practicality of extraction having regard to a range of considerations such as viability of the primary development, environmental considerations, the geology or stability of the site.

9 It is not viable to extract fireclay without coal, therefore the MSA for these resources has been combined

Exemptions

- 4.8** Exempting certain developments from the requirements of the Mineral Safeguarding Policy is based on the practicality of working minerals prior to certain types of development and the likely impact such developments may have on the sterilisation of mineral resources. A list of exempt developments is provided in the policy.

Co-ordination of the MSA policy

- 4.9** Policy recognition of the Mineral Safeguarding Area and provision of the maps is given in two separate ways:
1. The Minerals Plan defines the Mineral Safeguarding Area boundaries and contains a policy indicating how the safeguarded area will be taken in to account when determining planning applications. The mineral resources to be included within the Mineral Safeguarding Area are very extensive and cover large areas of land outside the urban area. The extent of each individual mineral included within the Mineral Safeguarding Area is shown on 4 separate 'Minerals Safeguarding Area' maps found in Appendix Maps.
 2. Each of the ten Greater Manchester Authorities Core Strategies will include an overarching policy on minerals that will recognise the importance of safeguarding. For each of the ten Greater Manchester Core Strategy Proposals Maps one composite MSA will be shown incorporating all the mineral types listed above and not identifying individual minerals types. This is because the mineral resources cover almost the whole of Greater Manchester and are too complex to show alongside all the other designations on a Core Strategy map and maintain an acceptable degree of clarity.

Mineral Safeguarding Areas

Policy 8

Prior Extraction of Mineral Resources

Within Mineral Safeguarding Areas

All non-mineral development proposals within the Mineral Safeguarding Area (see maps 4, 5, 6 & 7) should extract any viable mineral resources present in advance of construction. Proposals for prior extraction of minerals will be permitted provided the proposal is in accordance with Policy 2 Key Planning and Environmental Criteria.

Proposals for non-mineral development within the Mineral Safeguarding Areas that do not allow for the prior extraction of minerals will only be permitted where:

1. The need for the development outweighs the need to extract the mineral; or
2. It can be clearly demonstrated that it is not environmentally acceptable or economically viable to extract the mineral prior to non-mineral development taking place; or;
3. It can be clearly demonstrated that the mineral is either not present or of no economic value or too deep to extract in relation to the proposed development; or;
4. The development is limited ⁽¹⁰⁾ or temporary and would not prevent minerals extraction taking place in the future.

Exemptions

This policy does not apply to the following:

- i. Applications for Householder development
- ii. Applications for extension to commercial developments similar in scale to householder developments
- iii. Applications for Conservation Area Consent
- iv. Applications for Listed Buildings Consent
- v. Applications for Advertisement Consent
- vi. Applications for Tree Works
- vii. Prior notifications (telecommunications; forestry' agriculture; demolition); or
- viii. Certificates of Lawfulness of Existing or Proposed Use or Development (CLEUDs and CLOPUDs)

Outside Mineral Safeguarding Areas

10 limited being proposals which retain existing infrastructure, such as foundations, buildings and utilities

All non-mineral development proposals outside the Mineral Safeguarding Areas where the potential for prior extraction to take place has been identified⁽¹¹⁾ should seek to extract any viable mineral resources present in advance of construction. Proposals for prior extraction of minerals will be permitted provided the proposal is in accordance with Policy 2 'Key Planning and Environmental Criteria'.

Proposals for non-mineral development outside the Mineral Safeguarding Areas as referred to in footnote¹¹ that do not allow for the prior extraction of minerals will only be permitted where they accord with points 1 to 4 above.

Justification

- 4.10** The policy aims to take a balanced approach to protecting minerals resources in Greater Manchester against the need to attract investment and urban regeneration to a primarily built up area.
- 4.11** The exclusion of the urban area does not mean that prior extraction of minerals is wholly unsuitable in this location, but recognises the fact that there have been few instances of developers seeking to extract minerals in the past. Identifying locations within the urban area where such development could occur was also considered but due to lack of qualitative and quantitative evidence of mineral resources without borehole data, this was considered to be an unviable option.
- 4.12** Applications which come forward within the urban area which may be suitable for prior extraction of minerals will be considered by the relevant authority on a case by case basis.
- 4.13** Proposals for non-minerals development within an MSA are only required to meet one of the 4 criteria identified in Mineral Safeguarding Areas.

Prior Extraction Requirements

- 4.14** Where prior extraction is proposed, applicants will be required to provide details of the tonnages of minerals extracted, once the scheme has been completed. Account will be taken of whether a partial working of the deposit would be appropriate, together with the potential use of the mineral within the proposed development. The Local Planning Authority will also require restoration of the site to allow proposed development to proceed and that the restoration time scales do not delay primary development.
- 4.15** A prior extraction scheme for mineral extraction must contain a level of detail commensurate with those submitted for a minerals extraction scheme. This should include details on:

11 Either through Site Allocation DPDs, other Local Plan Documents or by the developer

Mineral Safeguarding Areas

- The quantity of mineral to be extracted
- The rate of extraction;
- The duration of extraction;
- Any mitigation measures proposed(dust, noise hydrology etc); and
- Restoration and compaction

4.16 The Local Planning Authority will take into account a number of factors when considering whether prior extraction is suitable, including the size, nature and need for the proposed development, the quantity and quality of the mineral, the environmental impacts and practicalities of the extraction. Account will also be taken of whether a partial working of the deposit would be appropriate, together with the potential use of the mineral within the proposed development.

Type of Planning Application

4.17 Where the applicant believes it is possible to extract the mineral ahead of the non mineral development, a full application for minerals extraction must be submitted. Once this is approved, an outline application for the non mineral development can be made.

4.18 Where an applicant is clear that prior extraction of mineral ahead of the non mineral development is not practicable, and intends to submit an outline application, the evidence to support this finding must be submitted at the outline application stage, not at reserved matters stage. This is because the Council will require all the facts, in order to make an informed decision about the principle of not extracting the mineral.

5 Development Management

- 5.1** Development Management policies set out the requirements to be met before planning permission is granted. The Development Management policies contained within the Minerals Plan address minerals specific issues only, as the Minerals Plan forms part of the wider development framework and each Authority will prepare policies in their individual Local Development Frameworks common to all types of development.
- 5.2** The policies in the Minerals Plan will be used to assess planning applications for minerals development within Areas of Search in the Minerals Plan or on other land brought forward by developers for minerals development.
- 5.3** The Minerals Plan includes Development Management policies that relate to the following specific issues:

Policy 9 'Sustainable Transport of Minerals'

Policy 10 'Reworking of Colliery Spoil Tips'

Policy 11 'Protecting existing mineral sites/infrastructure'

Policy 12 'Protecting quarries important for maintaining historic buildings'

Policy 13 'Restoration and Aftercare'

Criteria for assessing mineral extraction proposals

- 5.4** Policy 2 contains a number of environmental and general considerations against which planning applications for minerals developments will be assessed. These policies are relevant for applications for all minerals development including primary extraction, secondary/recycled aggregate processing, and other minerals developments such as wharves and depots etc. The extraction, processing, bulking and transportation of minerals should not give rise to any unacceptable impact on any interests of acknowledged importance. Applicants are encouraged to contact the relevant Mineral Planning Authority prior to submitting a planning application to discuss their proposal in detail.
- 5.5** Each Local Planning Authority has their own Development Management checklist which should be used as the basis for preparing information to support a mineral related planning application. However, applicants are expected to submit information including, but not restricted to, the Key Planning and Environmental Criteria listed in Policy 2.

Development Management

Transport of Minerals

- 5.6** The purpose of this policy is to minimise the potential transport impacts of mineral development and to encourage the use of the most sustainable transport modes.
- 5.7** The Minerals Plan aims to ensure that opportunities for sustainable transport of minerals are maximised. Whilst a proportion of minerals transported into and out of Greater Manchester utilise rail links, transport via canal is minimal and the majority of minerals are transported using the road network. Rail and canal transport are likely to be more viable where large volumes of mineral are required to be transported over long distances, from neighbouring authorities such as Derbyshire or Cheshire for example. Where smaller volumes of minerals or shorter distances are involved, for example within Greater Manchester, road transport is likely to be the only viable option.

Policy 9

Sustainable Transport of Minerals

Developers will be encouraged to transport minerals via the most sustainable transport mode (i.e rail and water) wherever practicable.

Where this is not feasible (i.e. the development is located too far from rail or canal links to make using them economical) or would be so costly as to render the minerals development unviable, planning permission will be granted for minerals development involving the transport of minerals by road where the applicant can clearly demonstrate that:

1. The use of more sustainable transport modes is not practicable; and
2. The proposed access arrangements would be safe and appropriate to the proposed development and the highway network is able to accommodate the traffic generated without having an unacceptable detrimental impact on road safety or an unacceptable impact on the environment or local residents.

Justification

- 5.8** Minerals development should not exacerbate any existing traffic problems or create unacceptable new impacts. Where alternative methods are not possible, the transport implications of the proposed development will be taken into account including the suitability of the road network to accommodate the traffic that would be generated and the effect on highway safety.

- 5.9** Where road transportation is unavoidable, the effects can be reduced by various measures. The Mineral Planning Authority may seek to secure agreements with applicants to ensure the use of approved access routes, which avoid residential areas and unsatisfactory roads, and may require operators to carry out highway strengthening and improvements before granting planning permission, where these are considered to be necessary as a result of the minerals development.

Reworking of Colliery Spoil Tips

- 5.10** This policy provides guidance on applications for the reworking of historic tips and will ensure they are dealt with in the same way as primary coal applications. The policy is provided to deal with applications for reworking of spoil tips where there is a clear need to do so to remedy environmental defects as a result of historical working only, and is not intended to support reworking of tips which have been adequately restored.
- 5.11** The policy recognises the range of benefits of permitting the reworking of colliery spoil tips, including improvements to environmental quality, additional primary coal production whilst avoiding the need for a new extraction site, and also social benefits gained from the final landuse.
- 5.12** The spatial strategy prioritises places where there are opportunities for beneficial restoration but as these places are unknown at present, they will come through this policy.
- 5.13** The Sustainability Appraisal noted the largely positive impact of including a policy supporting the reworking of colliery spoil tips, in terms of visual and amenity improvements amongst others. It also refers to the risk of negative impacts on established habitats/species from the reworking of these sites and goes on to suggest the use of ecological surveys to mitigate potential impacts.

Policy 10

Reworking of Colliery Spoil Tips

Applications for the reworking of colliery spoil tips will only be permitted where it can be demonstrated that:

1. The proposal is in accordance with the Key Planning and Environmental Criteria in Policy 2; and
2. Reworking is necessary to restore the tip or to remedy environmental defects and improve the visual amenity of the area.

Development Management

Justification

- 5.14** There are a number of colliery spoil tips in Greater Manchester as a result of past coal mining activity. Old methods of deep coal mining were inefficient and often left coal in the spoil. In some cases it may be economically viable to work the colliery spoil tip to recover the coal.
- 5.15** Recovering coal from colliery spoil tips involves the re-excavation of the spoil tip and the screening and washing of the spoil in order to separate out the coal. The remaining spoil requires disposal, usually in the same location. The impacts associated with reworking colliery spoil tips are similar to those associated with primary extraction and include amongst others: visual impact; traffic emissions; noise; and dust. Consideration of this and the fact that communities local to such sites will have been subject to such impacts historically should also be taken in to account when determining the need to rework such sites. If sites have been adequately restored there should be no need to rework them.
- 5.16** In addition, reworking of colliery spoil tips may have an adverse impact on established wildlife and biodiversity value. However, in some cases, restoring an old colliery spoil tip would result in a more satisfactory landform and afteruse, particularly because the acidic nature of colliery spoil tips can result in patchy vegetation. In addition, the separation of coal from spoil can reduce the amount of combustible material. All sites should be worked to the same standards as applications for primary minerals extraction.

Protecting existing minerals sites/infrastructure

- 5.17** The purpose of this policy is to protect existing minerals infrastructure, which includes wharves, depots, coating and batching plants; and existing operational quarries, from non-minerals development which may result in potential future landuse conflicts.
- 5.18** As mineral resources are finite, they should not needlessly be sterilised by non-mineral development. Sterilisation of mineral deposits may result from more permanent forms of surface development. In addition key mineral processing and handling sites currently occupy rail linked sites across Greater Manchester (Map 1) and it is important to protect these locations to ensure the supply of minerals into the sub region is not compromised by any competing development at these locations.

Policy 11

Protecting existing mineral site/infrastructure

Development on or adjoining an existing mineral working or site containing minerals infrastructure will be permitted provided it would not have an unacceptable impact on the continuation of mineral working or the continued operation of the minerals infrastructure.

Where the development is likely to have an unacceptable impact on the continuation of mineral working or the continued operation of the minerals infrastructure the applicant will be required to clearly demonstrate either:

- a. The mineral working and/or mineral infrastructure is no longer required; or
- b. The need for the proposed development outweighs the need to continue the mineral working and/or the need to retain the mineral infrastructure.

Justification

- 5.19** Development proposed on land adjacent to existing mineral sites/infrastructure has the potential to cause conflict with the existing operations and could mean continued use of that location for minerals development would be incompatible with the surrounding uses. As such development of this type will not be permitted unless it can be demonstrated to the satisfaction of the Local Planning Authority that the development will have no unacceptable adverse impact on the existing operation. This includes safeguarding of access to quarries where development could hinder the future viability of the site and supply of minerals to Greater Manchester.
- 5.20** Existing minerals infrastructure, including wharves, depots, coating and batching plants, is essential for importing, storing and processing minerals. It is important that rail-linked depots are protected to promote movement of material by rail and contribute to sustainable transport and to ensure that future potential for rail linked facilities are not constrained.

Protecting quarries important for maintaining historic buildings

- 5.21** The purpose of this policy is to protect quarries, including disused quarries, which have been identified as being important for maintaining/repairing historic buildings, from non-minerals development.

Development Management

- 5.22** As mineral resources are finite, they should not needlessly be sterilised by non-mineral development. Quarries identified by English Heritage as being important for maintaining and repairing historic buildings will be protected to ensure a future supply of stone for conservation purposes.

Policy 12

Protecting quarries important for maintaining historic buildings

When determining applications for non-mineral development within a distance that could affect quarries important for maintaining historic buildings, regard will be had to the impact the proposed development might have on the future operation of the facility as a location for minerals development and thus on the Minerals Plan aim and objectives.

If a development is likely to have an unacceptable impact on the future use of the quarry for minerals extraction it will be refused, unless it is demonstrated (by the applicant) that the quarry is no longer required, or that there is an overriding need for the non-mineral development in that location (see map 1 for details of quarries with planning permission which have been identified as important through the Strategic Stone Study).

Justification

- 5.23** Development proposed on land adjacent to existing/historic quarries has the potential to cause conflict with the existing/future operations and could mean continued use of that location for minerals development would be incompatible with the surrounding uses. As such development of this type will not be permitted unless it can be demonstrated, to the satisfaction of the Local Planning Authority that the development will have no adverse impact on the existing operation.
- 5.24** English Heritage have undertaken a study identifying quarries important for maintaining historic buildings in Greater Manchester (the 'Strategic Stone Study'). Any quarries identified through this work could offer potential for the extraction of stone for uses such as the repair of listed buildings and development in conservation areas, therefore this policy protects them from development which could prevent such use occurring in the future.

Restoration and aftercare

- 5.25** This policy provides guidance on the requirements for restoration and aftercare of mineral extraction sites. The policy and supporting text will not limit the types of potential afteruse rather it aims to ensure social, economic and environmental issues are considered.

Policy 13

Restoration and Aftercare

Applications for minerals extraction will be permitted where they are accompanied by appropriate proposals for site restoration and aftercare. This should include all of the following:

1. Details of the final restoration scheme and proposed future land use;
2. Details of timescales for completion of restoration including details of completion of individual phases of restoration where a progressive restoration scheme is proposed;
3. Details of aftercare arrangements that are to be put in place to ensure the maintenance and management of the site once restoration is complete;
4. Details of community liaison measures to be put in place during the operation of the site including mineral extraction, restoration and final land use.

In defining the future land use for the site, restoration should be geared towards improvement of final landuse and should:

- i. Demonstrate to the satisfaction of the Local Planning Authority that the proposal is in accordance with the Key Planning and Environmental Criteria in Policy 2;
- ii. Reflect the requirements of the relevant Development Plan;
- iii. Take account of the pre-working character of the site and its landscape setting where appropriate;
- iv. Where land is to be restored for agricultural or forestry, use appropriate restoration techniques to ensure that the land is capable of supporting such uses in the long term;
- v. Provide for the enhancement of the quality of the landscape, biodiversity assets, local environment, European sites, ecological value of the site or the setting of historic assets to the benefit to the local or wider community.

Justification

5.26 Mineral extraction has the potential to cause large scale impacts on the environment and landscape however these impacts are limited by the temporary nature of such operations and once the mineral has been removed the site can be used for other purposes whether this be built development or open landuse such as agriculture or restoration.

5.27 It is important to ensure that sites used for mineral extraction are adequately restored following mineral working, to prevent dereliction and secure the continuing positive use of the land. National Planning Policy makes it clear that restoration schemes should maximise the overall quality of the final

Development Management

landuse. They should consider increased public accessibility and geological conservation in addition to other high quality restoration and aftercare proposals to bring benefit to the wider community.

- 5.28** Local Planning Authorities must be satisfied prior to the granting of planning permission, that appropriate financial provision for restoration will be made by the applicant. Across the UK and indeed across Greater Manchester there have been historical problems with operators not completing the restoration of a site following minerals extraction. Whilst it is not appropriate for policies in development plans to require restoration bonds, applicants should demonstrate what the likely financial and material budgets for restoration, aftercare and afteruse will be, in accordance with national planning policy.
- 5.29** There remains exceptional cases where Local Planning Authorities can reasonably require a financial guarantee to cover restoration (including aftercare) through a voluntary agreement or planning obligation at the time planning permission is granted. Examples of these exceptions are set out within the Technical Guidance of the National Planning Policy Framework. Information will be sought from applicants in relation to these exceptions as appropriate.
- 5.30** In Greater Manchester the use of a Community Liaison Group has proven a useful forum to guide the development of the Cutacre Open Cast Coal site. Regular meetings with membership drawn from site operators, planning officers the Environment Agency and importantly local community representatives (including residents and businesses) have brought both local and environmental benefit and this model should be used for future minerals developments.
- 5.31** Potential afteruses will not be limited by the Minerals Plan and will be guided by relevant Development Plan Documents. It should be remembered that final restoration of a mineral extraction site can be used to complement other plans and strategies, e.g. contribute to Green Infrastructure or flood water storage.

6 Monitoring and Implementation

MONITORING

Introduction

- 6.1** The purpose of monitoring the Minerals Plan is to ensure that the performance of the Plan can be assessed against its Policies and therefore the achievement of the Aim and Objectives. Responsibility for monitoring lies with the Mineral Planning Authorities in Greater Manchester, and whilst detail has yet to be agreed, it is likely that Greater Manchester Minerals and Waste Planning Unit will provide technical support to collect baseline data on the targets and indicators set out within the Minerals Plan.
- 6.2** There are references to monitoring throughout the Minerals Plan, this chapter deals with overall aspects of monitoring and provides a comprehensive and consistent structure for assessing the Plan's progress in the form of a table for each of the Plan's policies. These tables contain targets which are linked to the relevant strategic objectives from Chapter 2.

Timing and reporting of monitoring

- 6.3** Monitoring of the policies in the Minerals Plan will be carried out annually. This will highlight the performance of all policies and include recommended actions where targets are not met. The outcome of this monitoring will be set out as part of individual district council's Annual Monitoring Reports.
- 6.4** At present the Aggregate Working Party (AWP) breaks down the North West share of the aggregate apportionment into sub regional areas. It collects information on mineral production on a confidential basis to calculate whether existing production meets the apportionment. The monitoring arrangements in this Plan are based on the continued existence of AWP. If this does not continue the Greater Manchester Planning Authorities, in conjunction with other authorities in the North West, will consider the need for an alternative arrangement.

Choice of indicators

- 6.5** Indicators have been chosen which provide a consistent basis for monitoring the performance of the Minerals Plan against its Aim, Objectives and Policies. The indicators chosen include Core Output Indicators (which are recommended for local authorities in monitoring the performance of their own local development frameworks)- See Table Monitoring Core Output Indicators through the Minerals Plan. Finally, specific targets have been developed to monitor the policies of the Minerals Plan.

Monitoring and Implementation

Table 4 Monitoring Core Output Indicators through the Minerals Plan

Indicator	What will be measured	Target	Links with Minerals Plan
M1	Production of primary land won aggregates by mineral planning authority	As set out in the AWP apportionments	Objective 4i Policy 2 & 3
M2	Production of secondary and recycled aggregates by mineral planning authority	Current data unreliable, target to be developed through Annual Monitoring Report trends	Objective 4iii

6.6 Definitions of terms used in the monitoring tables throughout the rest of this chapter are set out in Meaning of information in the monitoring tables.

Table 5 Meaning of information in the monitoring tables

Indicator	Target
This column contains information on what is to be monitored through each policy.	This column sets out the minimum target for the policy

Table 6 Policy 1: The Presumption in Favour of Sustainable Minerals Development

Indicator	Target
% of mineral development planning applications permitted in line with presumption in favour of sustainable development.	100%

Table 7 Policy 2: Key Planning and Environmental Criteria

Indicator	Target
% of mineral development planning applications permitted compliant with the requirements of the policy	100%

Table 8 Policy 3: Primary Extraction of Aggregate Minerals (implements objectives 1 & 4i)

Indicator	Target
% of applications for primary extraction of aggregate minerals permitted compliant with the requirements of the policy	100%

Table 9 Policy 4: Natural Building Stone (implements objectives 1 & 4ii)

Indicator	Target
% of natural building stone extraction permitted compliant with the requirements of the policy	100%

Table 10 Policy 5: Primary Extraction of Non Aggregate Minerals (implements objectives 1 & 4ii)

Indicator	Target
% of applications for primary extraction of non aggregate minerals permitted compliant with the requirements of the policy	100%

Table 11 Policy 6: Unconventional Gas Resources (implements objectives 1 & 5)

Indicator	Target
% of unconventional gas resources developments permitted compliant with requirements of the policy	100%

Table 12 Policy 7: Peat (implements objective 1)

Indicator	Target
% of peat extraction developments permitted compliant with the requirements of the policy	100%

Table 13 Policy 8: Mineral Safeguarding Areas (implements objectives 1, 2 and 3)

Indicator	Target
% of non mineral development permitted within the MSA (falling within the policy thresholds) which do not needlessly sterilise mineral resources.	100%

Table 14 Policy 9: Sustainable Transport of Minerals (implements objective 3)

Indicator	Target
% of mineral development permitted utilising most sustainable transport modes in compliance with the policies of the Minerals Plan	100%

Monitoring and Implementation

Table 15 Policy 10: Reworking of Colliery Spoil Tips (implements objectives 1 & 5)

Indicator	Target
% of applications for reworking of colliery spoil tips permitted compliant with the requirements of the policy	100%

Table 16 Policy 11: Protecting existing mineral sites/infrastructure (implements objectives 1, 2, 4, & 5)

Indicator	Target
% of non mineral related development permitted within a distance that could affect existing mineral sites/ infrastructure, in the absence of justification provided by the developer as set out within the policy.	0%

Table 17 Policy 12: Protecting quarries important for maintaining historic buildings (implements objectives 1, 2, 4 & 5)

Indicator	Target
% of non mineral related development permitted within a distance that could affect quarries important for maintaining historic buildings, in the absence of justification provided by the developer as set out within the policy.	0%

Table 18 Policy 13: Restoration and aftercare (implements objectives 1)

Indicator	Target
% of mineral related development permitted in line with the restoration and aftercare requirements	100%

IMPLEMENTATION

Introduction

6.7 No Plan making process is worthwhile unless it leads to action on the ground. Implementation of the policies within the Minerals Plan is designed to ensure that the Aim and Objectives of the Minerals Plan are met. This section identifies the mechanism by which the Minerals Plan policies will be achieved and the stakeholder(s) responsible.

Funding

6.8 All mineral developments within the Areas of Search identified in Minerals Plan and those which come forward outside of these areas within the Minerals Plan period (2012 to 2027) will be brought forward through private commercial funding. As such it is particularly difficult to identify specific sources of funding or specific companies who will have responsibility for taking forward individual sites. To build confidence that the Minerals Plan will be implemented, the Plan has involved the minerals industry from the start and has been influenced by their views on what can be delivered. Key players include Tarmac, Armstrong's, Offerton Sand and Gravel, Astley Sand and Gravel and Marshalls. This has involved four 'call for sites' exercises and a number of one-to-one meetings with industry and their representatives.

6.9 The following bullet points set out how policies in the Minerals Plan will be implemented:

Key Implementors

6.10 Implementation of the Minerals Plan, that is the construction and operation of mineral developments, will fall to several parties including the minerals industry and landowners:

- **The minerals industry** have the role of initiating, constructing and operating minerals developments in accordance with the Minerals Plan.
- **Local planning authorities** are responsible for monitoring the Plan and ensuring decisions on planning applications are made in line with the Minerals Plan, their Core Strategy and other relevant Development Plan Documents. Once adopted the Minerals Plan will become part of the Local Development Framework of each of the ten Greater Manchester Planning Authorities.
- **The Environment Agency** has a role in the operation of minerals developments in terms of regulating groundwater quality through abstraction and discharge permits.
- **Landowners** have a role in bringing forward suitable sites for mineral developments.

6.11 The following tables set out how policies in the Minerals Plan be implemented:

Monitoring and Implementation

Table 19 Policy 1: The Presumption in Favour of Sustainable Minerals Development

Implementation Mechanism	Stakeholder Responsible
Planning permission and subsequent development	Local Planning Authority/ Minerals Industry/ Landowners/ Environment Agency

Table 20 Policy 2: Key Planning and Environmental Criteria

Implementation Mechanism	Stakeholder Responsible
Planning permission and subsequent development	Local Planning Authority/ Minerals Industry/ Landowners/ Environment Agency

Table 21 Policy 3: Primary Extraction of Aggregate Minerals (implements objectives 1 & 4i)

Implementation mechanism	Stakeholder responsible
Planning permission and subsequent development	Local Planning Authority/ Minerals Industry/ Landowners/ Environment Agency

Table 22 Policy 4: Natural Building Stone (implements objectives 1 & 4ii)

Implementation Mechanism	Stakeholder Responsible
Planning permission and subsequent development.	Local Planning Authority/ Minerals Industry/ Landowners/ Environment Agency

Table 23 Policy 5: Primary Extraction of Non Aggregate Minerals (implements objectives 1 & 4ii)

Implementation Mechanism	Stakeholder Responsible
Planning permission and subsequent development.	Local Planning Authority/ Minerals Industry/ Landowners/ Environment Agency

Table 24 Policy 6: Unconventional Gas Resources (implements objective 1 & 5)

Implementation Mechanism	Stakeholder Responsible
Planning permission and subsequent development	Local Planning Authority/ Minerals Industry/ Landowners/ Environment Agency

Table 25 Policy 7: Peat (implements objective 1)

Implementation Mechanism	Stakeholder Responsible
Planning permission and subsequent development.	Local Planning Authority/ Minerals Industry/ Landowners/Environment Agency

Table 26 Policy 8: Mineral Safeguarding Areas (implements objectives 1, 2 and 3)

Implementation Mechanism	Stakeholder responsible
Planning permission and subsequent development.	Local Planning Authority/ Minerals Industry/ Landowners/ Environment Agency

Table 27 Policy 9: Sustainable Transport of Minerals (implements objective 3)

Implementation Mechanism	Stakeholder responsibility
Planning permission and subsequent development.	Local Planning Authority/ Minerals Industry/ Landowners/ Environment Agency

Table 28 Policy 10: Reworking of Colliery Spoil Tips (implements objectives 1 & 5)

Implementation Mechanism	Stakeholder responsibility
Planning permission and subsequent development.	Local Planning Authority/ Minerals Industry/ Landowner/ Environment Agency

Table 29 Policy 11: Protecting existing mineral sites/infrastructure (implements objectives 1, 2, 4, & 5)

Implementation Mechanism	Stakeholder responsibility
Refusal of planning permission.	Local Planning Authority

Table 30 Policy 12: Protecting quarries important for maintaining historic buildings (implements objectives 1, 2, 4 & 5)

Implementation Mechanism	Stakeholder responsibility
Refusal of planning permission.	Local Planning Authority

Monitoring and Implementation

Table 31 Policy 13: Restoration and aftercare (implements objectives 1)

Implementation Mechanism	Stakeholder responsibility
Conditions on planning permission and subsequent development.	Local Planning Authority/ Minerals Industry/ Landowner/ Environment Agency

Background information on minerals and Area of Search Methodology

7 Background information on minerals and Area of Search Methodology

7.1 This Appendix is split into three parts and is intended to provide additional information in support of Chapter 3. The first part provides more detailed information on the minerals found in Greater Manchester. The second part describes the aggregate apportionments in detail and how these have been used to calculate whether or not there is likely to be a shortfall in aggregate provision in the future. The third part describes the methodology used to identify the Areas of Search.

Minerals in Greater Manchester

Table 32 Minerals in Greater Manchester

Mineral Resource	Summary of Mineral Resource ⁽¹²⁾	Past, present and future local extraction opportunities
Glaciofluvial sand and gravel	Sands and gravels are derived from the erosion of local bedrock by the action of ice and water which is then deposited by glacial melt water. Sand and gravel is defined on the basis of particle size rather than composition, although they are usually rich in silica (quartz, quartzine and flint), but other rock types occur.	Currently worked at Pilsworth, Bury and Astley Moss, Salford. Morleys Hall, Wigan Offerton Sand, Stockport Limited potential for future extraction in Greater Manchester due to overlying urban areas.
Carboniferous Millstone Grit (sandstone)	Carboniferous sandstones consist of sand-sized particles with minor pebbles, composed dominantly of	Deposits located to north and east of Greater Manchester. Access may affect viability of developing new deposits although quality in some areas may be high.

12 Information drawn from the BGS report 'Mineral Resource Information in Support of National Regional and Local Planning: Greater Manchester (2006)'

Background information on minerals and Area of Search Methodology

Mineral Resource	Summary of Mineral Resource ⁽¹²⁾	Past, present and future local extraction opportunities
	<p>quartz, but also with some feldspar, which are cemented by silica, to a greater or lesser extent. The sandstones are typically buff coloured, although locally grey, and vary from fine to coarse grained.</p>	<p>The quality of aggregate currently extracted from Carboniferous Millstone Grit in Greater Manchester is generally low.</p> <p>Currently worked at Harwood, Montcliffe, Fletcher Bank and Buckton Vale Quarries. Pilkington Quarry was recently granted planning permission.</p>
Brickclay and fireclay within Pennine Coal Measures Formation	<p>Brick clays are essentially mud stones of different geological ages and compositions. Pennine Coal Measures mudstones which occur interbedded with siltstones, sandstone and coal seams, are the principal brick clay resource in the North West. Their mineralogy, chemistry and physical properties are critical to determining their suitability for the manufacture of structural clay products.</p>	<p>One active brickclay quarry remains at Harwood in Bolton. Potential for future extraction unknown due to limited data on quality.</p>
Surface mined coal (shallow coal)	<p>Coal is a readily combustible black or brownish-black sedimentary rock</p>	<p>Coal is a nationally strategic resource and should be safeguarded.</p>

12 Information drawn from the BGS report 'Mineral Resource Information in Support of National Regional and Local Planning: Greater Manchester (2006)'

Background information on minerals and Area of Search Methodology

Mineral Resource	Summary of Mineral Resource ⁽¹²⁾	Past, present and future local extraction opportunities
	normally occurring in rock strata in layers or veins called coal beds. The South Lancashire Coalfield covers much of Greater Manchester. A substantial portion of the coalfield is covered by urban development.	There are currently no open cast extraction sites in Greater Manchester, the last site ceased extracting in 2011.
Peat	Peat is the unconsolidated deposit of compressed plant remains in a water saturated environment such as a bog or fen. In England, peat is mainly dug from raised lowland bogs and is used almost entirely for horticultural purposes, either as growing media or as a soil improver.	Existing permissions until 2042 are sufficient to meet expected need. There is limited potential for further peat harvesting as the area has already been extensively worked. The current drive is towards carbon sequestration and as a consequence harvesting is not encouraged.

Sub-Regional Aggregate Apportionments

Sand and gravel

7.2 The current sub-regional apportionment (2005 – 2020) for sand and gravel production is 6.86 million tonnes (Mt), with an annual apportionment of 0.43Mt. This results in a landbank ⁽¹³⁾ of 14.2 years, which, based on the 2009 production rate and assuming all quarries remain active, would last until 2023 (see Apportionment figures (land-won sand and gravel) 2005 - 2020). NPPF says that MPAs should use the length of the landbank in its area as an indicator of when new permissions for aggregates extraction are likely to be needed. The recommended landbank for sand and gravel is 7 years and a landbank below these levels suggests that additional resources will need to be permitted if acceptable applications are submitted.

12 Information drawn from the BGS report 'Mineral Resource Information in Support of National Regional and Local Planning: Greater Manchester (2006)'

13 The landbank is calculated by dividing the total permitted reserves by the annual apportionment

Background information on minerals and Area of Search Methodology

7.3 The Minerals Plan covers the period to 2026, therefore, the Plan will need to seek to identify a 7 year landbank beyond 2027 (to 2034). However, National and Regional Guidelines for land-won aggregate only go up to 2020.

Table 33 Apportionment figures (land-won sand and gravel) 2005 - 2020

Sand and Gravel	Apportionment		Permitted reserves @ 2009	landbank @ 2009 (Years)
	Total requirement (2005-2020)	Annual requirement		
Greater Manchester, Halton Merseyside and Warrington (the 'sub-region')	6.86 million tonnes	0.43 million tonnes	6.1	14.2

7.4 There are 4 sand and gravel quarries in Greater Manchester; all are currently active and producing sand and gravel. They are spread across the sub-region in Bury (Pilsworth South), Salford (Astley Moss), Stockport (Offerton) and Wigan (Morleys Hall). Extraction at Morleys Hall takes place in the Bunter Pebble Beds whilst Pilsworth and Astley Moss exploit glaciofluvial deposits and Offerton exploits river terrace deposits. Map 1 shows the location of these quarries. There are no sand and gravel quarries in Merseyside, Halton and Warrington, which are the other areas which make up the sub-region. Therefore only Greater Manchester contributes to this part of the apportionment.

7.5 Average sand and gravel annual sales (1998 - 2009) was 0.37 million tonnes per annum, with 0.37 million tonnes being sold in 2009. This is enough to meet the annual requirement but continued production at these rates is susceptible to decline due to depleting reserves and planning restrictions. For example, it is understood that extraction will finish at Pilsworth South in 2011, after which time it will be difficult to meet the apportionment because only three quarries will be contributing to it. Morleys Hall is expected to cease extraction in 2022 whilst extraction is permitted at Astley Moss to 2021 and Offerton to 2042.

7.6 It is therefore likely that there will be a need to replace existing reserves as they become depleted over the plan period. The shortfall in permitted resources has been calculated based on the current apportionment figures and the maintenance of a 7 year landbank of sand and gravel reserves. Future Requirement for Sand and Gravel shows that the total reserves required to maintain a 7 year rolling landbank over the Plan period is 10.75 million tonnes. Given that the total permitted reserves in 2009 were 6.1 million tonnes, there is a shortfall of 4.65 million tonnes.

Background information on minerals and Area of Search Methodology

- 7.7** Although four 'calls for sites' were held as part of preparation of the Minerals Plan, no additional resources were identified. Therefore, the Minerals Plan identifies only Areas of Search for sand and gravel within which particular sites could be granted to meet any shortfall in supply if suitable applications are made.

Table 34 Future Requirement for Sand and Gravel

Annual requirement (million tonnes)	Requirement to end of plan period 2009 - 2027 (years)	Requirement beyond 2027 (years)	Total requirement to maintain landbank (years)	Total reserves required to maintain 7 year rolling landbank (million tonnes)
0.43	18	7	25	10.75

Crushed rock

- 7.8** The current sub-regional apportionment (2005-2020) for crushed rock aggregate production is 21.1Mt with an annual requirement of 1.32Mt. This results in a landbank of 13.05 years, which, assuming all quarries remain active, would last until 2022 (See **Apportionment figures (crushed rock) 2005 - 2020**). The recommended landbank for crushed rock is 10 years.
- 7.9** The Minerals Plan covers the period to 2026, therefore, the Plan will need to seek to identify a 10 year landbank beyond 2027 (to 2037). However, National and Regional Guidelines for land-won aggregate only go up to 2020.

Table 35 Apportionment figures (crushed rock) 2005 - 2020

Crushed Rock	Apportionment		Permitted reserves @ 2009	landbank @ 2009 (Years)
	Total requirement (2005-2020)	Annual requirement		
Greater Manchester, Halton Merseyside and Warrington (the 'sub-region')	21.1 million tonnes	1.32 million tonnes	17.23 million tonnes	13.05

- 7.10** There are seven crushed rock aggregate quarries in Greater Manchester which are concentrated in the north and east of the sub-region. Only four are currently active (producing aggregate); the remaining three are currently inactive and do not produce aggregate, although still contribute to the

Background information on minerals and Area of Search Methodology

landbank. Map 1 shows the location of these quarries. In addition, there is one quarry in Merseyside and one in Warrington producing crushed rock aggregate which also contribute to the apportionment.

- 7.11** Average crushed rock annual sales (1998 - 2009) were 1.29 million tonnes per annum. The *maximum permitted rate* of extraction of active quarries in Greater Manchester is 1.52 million tonnes per annum. Even without considering input from quarries in Merseyside and Warrington, this is sufficient to meet the annual requirement. However, the actual sales of crushed rock in the sub-region in 2009 was 0.30 million tonnes and the annual requirement has not been met by the sub-region since 1999. This is because the material produced in the sub-region is generally low quality fill material that competes with recycled aggregate.
- 7.12** Although there is currently a sufficient landbank for crushed rock, as these quarries become depleted over the plan period there will be a requirement to replace low quality aggregate resources to meet the demands of local, low specification construction markets.

Table 36 Future requirement for crushed rock

Annual requirement (million tonnes)	Requirement to end of plan period 2009 - 2027 (years)	Requirement beyond 2027 (years)	Total requirement to maintain landbank (years)	Total reserves required to maintain 10 year rolling landbank (million tonnes)
1.32	18	10	28	36.96

- 7.13** The shortfall in permitted resources has been calculated based on the current apportionment figures and the maintenance of a 10 year landbank of crushed rock reserves (see Future requirement for crushed rock). This table shows that the total reserves required to maintain a 10 year rolling landbank over the Plan period is 36.96 million tonnes. Given that the total permitted reserves in 2009 were 17.23 million tonnes, there is a shortfall of 19.73 million tonnes. However, total sales of crushed rock has fallen in recent years and if it does not increase, the current permitted reserves would last for 57 years to 2066 although this is unlikely to be the case as one quarry was not operating in 2009, thus lowering the sales for that year.
- 7.14** Given that the quality of crushed rock in Greater Manchester is such that it competes with secondary and recycled aggregate, it is likely that much of the shortfall will be met by these alternative materials. However, Areas of Search for sandstone/gritstone have been identified in the Minerals Plan within which particular sites could be granted to meet any remaining shortfall in supply if suitable applications are made.

Background information on minerals and Area of Search Methodology

Method for identifying Areas of Search for sand, gravel and sandstone/gritstone

- 7.15** The previous Greater Manchester Minerals Plan was published in 1989 and contained Areas of Search for sand, gravel and gritstone/sandstone. This used the extent of mineral resources from BGS mapping as a starting point and applied a series of constraints to remove land which would be unlikely to be suitable for mineral development or where mineral extraction would cause harm to interests of acknowledged importance. This work was supported by a drilling programme undertaken by the Greater Manchester Council in the early 1980's.
- 7.16** The 1989 Areas of Search have been reviewed to ensure they fully reflect modern environmental and heritage designations, and to reflect the expansion in urban development. They have also been updated to reflect information provided by industry and landowners where there may be potential for minerals extraction but for which no specific evidence has been submitted.
- 7.17** The 1989 Areas of Search for coal have not been taken forward because not enough is known about this resource to identify an Area of Search.
- 7.18** Two categories of constraints have been used to update the 1989 Areas of Search. Category 1 constraints are considered to be absolute in normal circumstances. Category 2 constraints include those where the Mineral Planning Authority would normally prefer mineral working did *not* take place, particularly where it can be demonstrated that adequate resources exist elsewhere. Category 2 constraints have not been used as absolute constraints but have informed the development of the proposed Areas of Search.
- 7.19** The updated Areas of Search are influenced by the underlying geology. For sand and gravel, these are concentrated in the northeast of Greater Manchester (principally within the districts of Bury, Rochdale and Oldham). Outside of these Districts are other, scattered, Areas of Search for sand and gravel and all typically coincide with glaciofluvial sand and gravel deposits, and to a lesser extent river terrace, sand and gravel deposits.
- 7.20** Areas of Search for sandstone/gritstone are coincident with outcrops of Carboniferous sandstones that occupy steeper, higher ground to the north and east of Greater Manchester. As such these areas have been less affected by urban development than sand and gravel.

Category 1 Constraints

- Urban Area
- Special Protection Area and Candidate Special Protection Area
- Special Area of Conservation and Potential Area of Conservation
- National Park
- Scheduled Ancient Monuments
- National Trust sites

Background information on minerals and Area of Search Methodology

- Sites of Special Scientific Interest
- Grade 1 and 2 agricultural land
- Country Parks
- Sites of Biological Importance
- Conservation Area
- Listed Buildings
- Registered Parks and Gardens
- Public Open Space
- Local nature reserve
- Other allocations for development in Core Strategy

Category 2 Constraints

- Grade 3a agricultural land ⁽¹⁴⁾.
- Woodlands
- River valleys ⁽¹⁵⁾

7.21 A 250m buffer from the urban area has been applied, the aim of this is to protect residents from the noise and dust created by quarrying.

7.22 The Green Belt is not specifically excluded from Areas of Search because national policy states that mineral extraction need not be inappropriate development [in the Green Belt] ⁽¹⁶⁾. Furthermore, in Greater Manchester, the Green Belt designation generally covers all land not in the urban area so to exclude the Green Belt would leave no land remaining. Recreational routes have been removed where practicable, but where this would lead to complex Areas of Search they have been 'washed over'. There is no suggestion, however, that such areas should be considered for mineral working.

7.23 Where overhead electricity transmission lines and high pressure gas transmission pipelines and associated installations exist, these should be taken into account at the planning application stage. Areas at risk of flooding will be taken into account when assessing Areas of Search through the Minerals Plan but will not be used as a constraint.

7.24 The next step used the latest aerial photography to identify areas with little or no prospect of minerals working taking place. Such areas were considered on a case-by-case basis and excluded where minerals working would be unlikely to be acceptable. They include:

14 Note - Grade 3a agricultural land is not mapped for the whole of Greater Manchester and only known occurrences are excluded

15 Note - Although the presence of river valleys has informed the methodology, sand and gravel deposits in Greater Manchester are generally located in river valleys and in some cases, minerals operations can provide a beneficial afteruse.

16 NPPF

Background information on minerals and Area of Search Methodology

- 'Islands' of less than 2ha e.g. within urban area;
- Sand and gravel less than 200m wide extending into urban area;
- Areas with landscape value
- Sewage works;
- Reservoirs;
- Storage/parking areas attached to industrial estates;
- Existing mineral workings;
- Areas sterilised by waste disposal;
- Cemeteries;
- Playing fields attached to schools/colleges; and
- Other open spaces that may be of public value in line with the typology set out in PPG17 Annex: Definitions ⁽¹⁷⁾

7.25 The exclusion of roads, railways, canals etc. would produce unnecessary complex areas of search and therefore they have been 'washed over'. There is no suggestion, however, that such areas should be considered for mineral working.

7.26 Each of the ten Greater Manchester Authorities was consulted with regards to applying the Category 2 constraints. As a result the Areas of Search were amended and the supporting document entitled 'Areas of Search Amendments' provides details of such amendments.

17 CLG (2002) PPG17: Planning for Open Space, Sport and Recreation Annex: Definitions

Background information on minerals and Area of Search Methodology

8 Maps

Maps

9 Replacement of existing Mineral Policies

Replacement of Saved UDP Policies

- 9.1** All the policies in the 10 Greater Manchester District's Unitary Development Plans (UDP) have been saved until they are replaced by policies of the Local Development Framework, including the Minerals Plan. The following list sets out the UDP minerals policies that are intended to be replaced by Minerals Plan policies when they are adopted.

Table 37 Unitary Development Plan for Bolton - replacement of saved policies

Policy Number	Title	Comment
M1	Minerals	Replaced with Bolton's Core Strategy Policy P3; and Greater Manchester Minerals Plan Policy 2, 3, 4 and 8.
M2	Minerals Areas of Search	Replaced with Bolton's Core Strategy Policy P4; and Greater Manchester Minerals Plan Policy 2, 3.
M3	Determining planning applications	Replaced with Bolton's Core Strategy Policy CG4, P4 and generic Development Management Policies; Greater Manchester Minerals Plan Policies 2, 3, 5, 8, 9, 10, 11, 12 and 13; and Greater Manchester Waste Plan Policies 1 and 2.
M4	Conditions to be applied/ Legal Agreements	Replaced with generic Development Management Policies within the LDF and Minerals Plan Policies 2, 3, 5, 9, 10, 11, 12 and 13.
M5	Aggregate Mineral Workings	Replaced with Bolton's Core Strategy Policy P4; and Minerals Plan Policy 2 and 3.

Table 38 Bury Unitary Development Plan - replacement of saved policies

Policy Number	Title	Comment
MW1	Protection of Mineral Resources	Replaced with Bury's Core Strategy Policy SDS10; and Minerals Plan Policies 2, 3 and 8.

Replacement of existing Mineral Policies

Policy Number	Title	Comment
MW2	Environmental Considerations for Mineral Workings	Replaced with Bury's Core Strategy Policy SDS10 and generic Development Management Policies; Minerals Plan Policy 2, 3, 5, 9, 10, 11, 12 and 13.
MW2/3	Development Control Conditions (Minerals)	Replaced with generic Development Management Policies within the LDF; Minerals Plan Policies 2, 3, 5, 9, 10, 11, 12 and 13.
MW2/4	Longstanding Planning Permissions	This falls under ROMP
MW2/5	Derelict or Degraded Land (Minerals)	Replaced with Minerals Plan Policy 10
MW2/6	Alternatives to Newly Won Minerals	Replaced with Minerals Plan Policy 2 and 3 and Waste Plan Policy 4 and 5
MW2/7	Transport Routes for Minerals and Mineral Waste	Replaced with Minerals Plan Policy 9
MW2/8	Materials for Restoration	Replaced with Minerals Plan Policy 13
MW2/9	Standards of Restoration (Minerals)	Replaced with Minerals Plan Policy 13

Table 39 Manchester Unitary Development Plan - replacement of saved policies

Policy Number	Title	Comment
DC28	Minerals	Replaced with generic Development Management Policies within the LDF; and Minerals Plan Policies 2, 3, 5, 8, 9, 10, 11, 12 and 13; Waste Plan Policies 6 and 7.

Replacement of existing Mineral Policies

Table 40 Oldham Replacement Unitary Development Plan - replacement of saved policies

Policy Number	Title	Comment
NR4	The Need for Minerals	Replaced with Oldham Joint DPD Policy 8 and Minerals Plan Policies 2, 3 and 5.
NR4.1	Prevention of Mineral Sterilisation	Replaced with Oldham Joint DPD Policy 8 and Minerals Plan Policy 8, 11 and 12.
NR4.2	Primary, Secondary and Recycled Aggregate	Replaced with Oldham Joint DPD Policy 8 and Minerals Plan Policy 2 and 3; Waste Plan Policy 4 and 5.
NR4.3	Criteria for assessing proposals for mineral working and processing	Replaced with Oldham Joint DPD Policy 8 and generic Development Management Policies within the LDF and Minerals Plan Policies 2, 3, 4, 8, 9, 10, 11, 12 and 13.

Table 41 Rochdale Unitary Development Plan - replacement of saved policies

Policy Number	Title	Comment
G/M/1	Protection and Prudent use of Resources	Replaced with Minerals Plan Policy 2 and 3.
M/2	Location of Mineral Working	Replaced with Minerals Plan Policies 2, 3, 4 and 6.
M/3	Assessment of Proposals	Replaced with Minerals Plan Policies 2, 3, 5, 6, 7, 8, 9, 11, 12
M/4	Operating Conditions	Replaced with Minerals Plan Policies 2, 3, 5, 6, 8, 9, 11 and 12.
M/5	Restoration and Aftercare	Replaced with Minerals Plan Policy 11 and 12.
M/6	Transport of Minerals	Replaced with Minerals Plan Policy 2, 3 and 5.
M/7	Alternatives to Newly-Won Minerals	Replaced with Core Strategy Policy W3; Minerals Plan Policy 9.
M/8	Long Standing Planning Permissions	This falls under ROMP

Replacement of existing Mineral Policies

Table 42 Salford City Council Unitary Development Plan - replacement of saved policies

Policy Number	Title	Comment
ST17	Mineral Resources	Replaced with: Minerals Plan Policies 2, 3, 8, 11 and 12.
M1	Protection of Mineral Resources	Replaced with: Minerals Plan Policies 8, 11 and 12.
M2	Mineral Development	Replaced with: Salford's Core Strategy Policy MN1; Minerals Plan Policies 2, 3, 5, 6, 7, 9, 10 and 13.

Table 43 Stockport Unitary Development Plan Review - replacement of saved policies

Policy Number	Title	Comment
MW1	Mineral Extraction	Replaced with Minerals Plan Policies 2, 3, 4, 6, 8, 10, 11, 12.
MW1.1	Development Control Criteria for Minerals or Waste Development	Replaced with generic Development Management Policies within the LDF; Minerals Plan Policies 2, 3, 5, 9, 10, 11, 12 and 13.
MW1.3	Mineral and Waste Sites: Schemes of working, restoration and aftercare	Replaced with Minerals Plan Policies 2, 3, 5 and 13.
MW1.4	Mineral and Waste Sites: Control over Operations	Replaced with generic Development Management Policies within the LDF and Minerals Plan Policies 2, 3, 4, 5, 9, 10, 11, 12 and 13.

Table 44 Tameside Unitary Development Plan - replacement of saved policies

Policy Number	Title	Comment
1.13	Meeting obligations on minerals, waste and energy	Minerals aspects replaced with: Minerals Plan Policies 2, 3, 4, 5 and 6.
MW1	Protection of Mineral Resources	Replaced with Minerals Plan Policies 8, 11 and 12.

Replacement of existing Mineral Policies

Policy Number	Title	Comment
MW2	Supply of Aggregate Minerals	Replaced with Minerals Plan Policies 2, 3 and 5.
MW3	Reclamation of Derelict Land	Replaced with Minerals Plan Policy 10.
MW5	Movement of Minerals and Waste	Replaced with Minerals Plan Policy 9.
MW9	Control of Minerals and Waste Developments	Replaced with generic Development Management Policies within the LDF and Minerals Plan Policies 2, 3, 34, 6, 7, 9, 10, 11, 12 and 13.

Table 45 Trafford Unitary Development Plan - replacement of saved policies

Policy Number	Title	Comment
M1	Protection of Mineral Deposits	Replaced with Trafford's Core Strategy W3 and Minerals Plan Policy 8.
M2	Extraction of Minerals	Replaced with Trafford's Core Strategy W3 and Minerals Plan Policies 3 and 5.
M3	Aggregate Minerals	Replaced with Minerals Plan Policy 2, 3 and 5.
M4	All Minerals - Exploration Criteria	Replaced with generic Development Management Policies within the LDF and Minerals Plan Policies 2, 3, 5, 9, 10, 11, 12 and 13.
M5	Mineral Sterilisation	Replaced with Minerals Plan Policies 8, 11 and 12.
M6	Aggregates	Replaced with Minerals Plan Policy 2 and 3.
M7	All Minerals Other Than Oil And Gas, Including the Reworking of Spoil Tips	Replaced with Minerals Plan Policies 2, 3, 4, 6, 7, 9, 10 and 13.
M8	All Minerals - Working and Restoration	Replaced with Minerals Plan Policy 2, 3, 5 and 13.

Replacement of existing Mineral Policies

Policy Number	Title	Comment
M9	Standards of Restoration	Replaced with Minerals Plan Policy 13.
M10	Reclamation	Replaced with Minerals Plan Policy 10
M11	Modification of Old Planning Permissions	This falls under ROMP
M12	Provision of Depots	Replaced with Minerals Plan Policy 9, 11 and 12.
M13	Oil and Natural Gas	Replaced with Minerals Plan Policy 2, 3, 5 and 6.
M14	All Minerals - Standards of Working	Replaced with generic Development Management Policies within the LDF and Minerals Plan Policies 2, 3, 5, 9, 10, 11, 12 and 13.

Table 46 Replacement Wigan Unitary Development Plan - replacement of saved policies

Policy Number	Title	Comment
MW1	Mineral Working	Replaced with Core Strategy Policy CP16 and Minerals Plan Policy 2 and 3.
MW1A	Protection of Mineral Resources	Replaced with Minerals Plan Policies 8, 11 and 12.
MW1B	Aggregate Production	Replaced with Minerals Plan Policy 2, 3, 5 and 9.
MW1C	Mineral Working and Exploration	Replaced with Minerals Plan Policies 2, 3, 5 and 9.
MW1D	Remnant Mossland	Replaced with Minerals Plan Policy 2 and 6.
MW1E	Operation and Restoration of Mineral Workings	Replaced with generic Development Management Policies within the LDF and Minerals Plan Policies 2, 3, 5, 9, 10, 11, 12 and 13.

Replacement of existing Mineral Policies

Policy Number	Title	Comment
MW1F	Control of Mineral Workings	Replaced with generic Development Management Policies within the LDF and Minerals Plan Policies 2, 3, 5, 9, 11, 12 and 13.

Replacement of existing Mineral Policies

10 Summary of Sustainability Appraisal

- 10.1** Sustainability Appraisal is a systematic process used to assess the extent to which a plan or strategy will help to achieve relevant social, environmental and economic objectives. It also suggests ways of avoiding or reducing negative impacts. The findings of SA should be reflected in the adopted Minerals Plan to help ensure that it maximises its contribution to future sustainability.
- 10.2** The Sustainability Appraisal considers the potential implications of the Minerals Plan by assessing the plan against a series of social, environmental and economic objectives.
- 10.3** The Sustainability Appraisal process concluded that the Minerals Plan has the potential to deliver a wide range of social, environmental and economic benefits. However, it also identified instances where the Plan could have a negative or uncertain impact on sustainability objectives and several opportunities to further enhance the Plan's sustainability.

Aim

- 10.4** By facilitating the use of recycled aggregates and secondary mineral products and delivering a steady supply of minerals to meet Greater Manchester's needs, it is envisaged that the Aim would have a significant positive impact on the objectives relating to exploiting the growth potential of business sectors; restoring and protecting land and soil; and ensuring the prudent use of natural resources.
- 10.5** The Aim is also likely to have some positive effect on the sub-region's labour market; the image of Greater Manchester; reducing the need to travel; mitigating climate change and protecting air quality. Furthermore, the strengthening of the reference to protecting the environment and community from the impacts of minerals development should ensure the Aim has a positive impact on the objectives relating to physical and mental health; biodiversity, species, habitats and sites of geological importance; landscape and townscape character; local environmental quality; the quality of controlled waters; and risk of flooding. There are anticipated negative or uncertain effects of the Aim on the sustainability objectives.

Minerals Plan Policies

- 10.6** The Key Planning and Environmental Criteria policy would have a positive impact on a wide range of sustainability objectives, particularly those relating to environmental issues. The policy would however have an uncertain impact on a number of economic objectives. Nevertheless, as the approach set out in the policy is necessary to ensure mineral developments contribute to sustainable development, no mitigation measures are recommended to address this.

Summary of Sustainability Appraisal

10.7 The inclusion of a cross-reference to the Key Planning and Environment Criteria contained within Policy 2 ensures that each of the subsequent policies in this chapter would have a positive impact on a range of sustainability objectives, particularly those relating to environmental issues. In addition, policies 3, 4 and 5 would have a positive impact on a number of the economic objectives and the Peat policy would have a particularly significant impact on the objectives relating to biodiversity; land and soil; mitigating climate change; flood risk; and the prudent use of natural resources. It is however anticipated that the policy relating to Unconventional Gas Resources would have a negative impact on the objectives relating to climate change and energy use. Nevertheless, it is recognised that the importation of energy minerals from outside the UK would have a markedly greater impact on the objective of mitigating climate change.

Mineral Safeguarding Areas

10.8 The policy relating to Mineral Safeguarding Areas (MSAs) would have a major positive impact on the objective of ensuring the prudent use of natural resources and the sustainable management and safeguarding of existing resources and some positive impact on a range of economic, social and environmental objectives. The policy would not have any uncertain or negative effects.

Development Management Policies

10.9 The policy relating to the transport of minerals would impact positively on a number of the sustainability objectives, including those relating to the use of sustainable transport modes; mitigating climate change; promoting the efficient use of energy; protecting townscape character; and protecting local environmental quality.

10.10 The reworking of colliery spoil tips policy would have a positive impact on a number of the economic and environmental objectives. In particular, it would have a major positive impact on the objectives of ensuring the prudent use of natural resources and protecting landscape and townscape character. It does however have the potential to have a negative impact on the objectives relating to air quality; reducing the need to travel; mitigating climate change; and minimising the requirement for energy use.

10.11 The policies relating to Protecting Existing Minerals Sites/Infrastructure and Quarries Important for Maintaining Historic Buildings would both have a largely positive impact on the sustainability objectives. Neither of these policies would have any negative or uncertain impacts on the sustainability objectives.

- 10.12** The aftercare and restoration policy would have a range of positive impacts, particularly on the environmental objectives. There are no predicted negative effects on the sustainability objectives. However, as the potential afteruses of sites are unknown, it is difficult to appraise the impact of the policy on some of the sustainability objectives.

Summary of Sustainability Appraisal

Glossary

Acronym	Term	Definition
	Aggregates	Sand, gravel, crushed rock and other bulk materials used by the construction industry.
AGMA	Association of Greater Manchester Authorities	Formed after the abolition of the Greater Manchester Council in 1986 and co-ordinates certain functions at a metropolitan level.
	Apportionment	The splitting of regional supply guidelines for minerals demand between planning authorities or subregions.
AMR	Annual Monitoring Report	A report submitted to Government by Local Planning Authorities assessing Local Development Framework production progress and policy effectiveness.
C&D	Construction and Demolition Waste	Controlled waste arising from the construction, repair, maintenance and demolition of buildings and structures
CDEW	Construction, Demolition and Excavation Waste	Construction, Demolition and Excavation Waste materials produced as a waste from construction sites, or from the demolition of buildings or structures, or produced from excavation
	Conditions (or 'Planning Condition')	Requirements attached to a Planning Permission to limit or direct the manner in which development is carried out.
	Conservation Area	Areas of special architectural or historic interest, the character, appearance or setting of which it is desirable to preserve or enhance.
	Controlled Waters	Includes territorial and coastal waters, inland freshwaters and groundwater.
	Core Strategy	Sets out the long-term spatial vision for the local planning authority area, the spatial objectives, and outlines the strategic policies required to deliver that vision in respect of minerals and waste.
	Cumulative Impact	A number of developments in a locality or a continuous activity over time that together may have an increased impact on the environment, local community or economy.
DCLG	Department for Communities and Local Government	The Government department responsible for planning and local government
Defra	Department for Environment, Food and Rural Affairs	Government department with national responsibility for sustainable waste management
DECC	Department of Energy and Climate Change	Government Department with national responsibility for energy and climate change

Glossary

Acronym	Term	Definition
	Development Control/ Development Management	The process whereby a local planning authority receives and considers the merits of a planning application and whether it should be given permission having regard to the development plan and all other material considerations.
DPD	Development Plan Document	Development Plan Documents are prepared by local planning authorities and outline the key development goals of the local development framework.
EIA/ES	Environmental Impact Assessment and Environmental Statement	Applicants for certain types of development are required to submit an 'environmental statement' accompanying a planning application. This evaluates the likely environmental impacts of the development together with an assessment of how the severity of the impacts could be reduced.
GONW	Government Office for the North West	The Government's regional office.
GM	Greater Manchester	The area covered by the districts of Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan.
	Groundwater	Water lying underground, within strata known as aquifers.
HRA	Habitat Regulations Assessment	Assessment of the impacts of implementing a plan or policy on an internationally important habitat such as SAC or SPA.
HGV	Heavy Goods Vehicle	A large vehicle for transporting goods.
JMDPD	Joint Minerals Development Plan Document	A planning document which will become part of the ten Greater Manchester authorities' Local Development Framework.
	Landbank	A stock of planning permissions for reserves that ensure continuity of production for a set number of years.
	Land Use Planning	The Town and Country Planning system regulates the development and use of land in the public interest.
LDF	Local Development Framework	Describes the folder of documents which contains all of a local authority's local development documents (including development plan documents, local development scheme and statement of community involvement).
LDS	Local Development Scheme	The timetable for the development of Local Development Frameworks which conforms with the Statement of Community Involvement.
	Low Quality Aggregate	Low quality aggregates do not have the same properties, for example crushing strength, resistance to impact, etc, as good quality aggregates and are

Glossary

Acronym	Term	Definition
		frequently used for low-value end uses, for example as construction fill.
LSP	Local Strategic Partnership	Non-statutory, non-executive body bringing together representatives of the public, private and voluntary sectors. Local Strategic Partnerships are responsible for preparing Community Strategies.
	Manchester City Region	A city region is based on the economic footprint of a city. The Manchester City Region extends beyond the administrative boundary of Greater Manchester and incorporates the interconnection of markets for jobs, housing and the supply of goods or services.
	Minerals Hierarchy	The hierarchical approach to minerals supply set out in MPS1 aims to reduce as far as practicable the quantity of material used and waste generated, then to use as much recycled and secondary material as possible, before finally securing the remainder of material needed through new primary extraction.
MPA	Mineral Planning Authority	The planning authority responsible for planning control of minerals development. The 10 mineral planning authorities in Greater Manchester are the statutory bodies controlling mineral workings in their areas.
MPG	Minerals Planning Guidance	Documents issued by the DCLG setting out government policy and advice on minerals planning issues. (Currently being replaced by Minerals Planning Policy Statements).
MPS	Minerals Policy Statements	Minerals Planning Statement published by DCLG. MPSs will eventually replace Minerals Planning Guidance notes.
	Mineral Reserves	Mineral resources with planning permission for extraction.
	Mineral Resources	Potentially valuable minerals for which reasonable prospects exist for eventual extraction.
	Mines and Quarries Waste	Waste from a mine or quarry.
ODPM	Office of the Deputy Prime Minister	The Government department formerly responsible for planning and local government. These functions are now the responsibility of DCLG.
	Planning and Compulsory Purchase Act 2004	The Act updates elements of the 1990 Town and County Planning Act. The Planning and Compulsory Purchase Act 2004 introduces a new system for local planning; reforms to the development control and compulsory purchase and compensation systems; and removes crown immunity from planning controls.
PPS	Planning Policy Statement	Issued by central Government to replace the existing Planning Policy Guidance notes, in order to provide

Glossary

Acronym	Term	Definition
		greater clarity and to remove from national policy advice on practical implementation, which is better expressed as guidance rather than policy.
	Public Consultation	A process through which the public is informed about proposals fashioned by a planning authority or developer and invited to submit comments on them.
	Recycled Aggregates	Aggregates produced from recycled construction materials such as crushed concrete and planings from tarmac roads.
AWP	Aggregates Working Party	A working group consisting of local authority officers, representatives of the aggregates industry and Central Government.
RSS	Regional Spatial Strategy	Formerly the “development plan” for a region. The Government announced the revocation of RSS in July 2010.
	Secondary Aggregates	Includes by-product of waste, synthetic materials and soft rock used with or without processing as a secondary aggregate.
SSSI	Site of Special Scientific Interest	A site identified under the Wildlife and Countryside Act 1981 (as incorporated in the Countryside and Rights of Way Act 2000) as an area of special interest by reason of any of its flora, fauna, geological or physiographical features (basically plants, animals and natural features relating to the Earth's structure).
	Spatial Planning	Spatial planning goes beyond traditional land use planning to bring together and integrate policies for the development and use of land with other policies and programmes which influence the nature of places and how they function. This will include policies which can impact on land use, for example, by influencing the demands on, or needs for, development, but which are not capable of being delivered solely or mainly through the granting or refusal of planning permission and which may be implemented by other means.
SAC	Special Area of Conservation	Designation made under the Habitats Directive to ensure the restoration or maintenance of certain natural habitats.
SPA	Special Protection Area	Sites classified under the European Community Directive on Wild Birds to protect internationally important bird species.
	Stakeholder	Any person or organisation who is interested in, or may be affected by, the planning proposals being considered.
SCI	Statement of Community Involvement	Local Development Framework document that sets out the Council's policy for involving the public and

Glossary

Acronym	Term	Definition
		other stakeholders in the preparation and revision of the Local Development Framework.
SEA	Strategic Environmental Assessment	A formal process which analyses and evaluates the environmental effects of a plan or programme (carried out in conjunction with Sustainability Appraisal)
	Soundness (tests of)	When the Minerals Plan is submitted, the examination will consider whether the policies contained within it are 'sound' - in other words 'fit for purpose'. To be sound the Strategy must pass three 'Tests of Soundness' defined by Planning Policy Statement 12 (PPS12).
SA	Sustainability Appraisal	A formal process which analyses and evaluates the environmental, social and economic impacts of a plan or programme.
SCS	Sustainable Community Strategy	A strategy prepared by local authorities to help deliver local community aspirations under the Local Government Act 2000.
	Sustainable Development	Sustainable development is focused on providing a better quality of life for everyone now and for generations to come. This is achieved through considering the long-term effects of social, economic and environmental impacts in an integrated and balanced manner.
	The Act	Refers to the Planning and Compulsory Purchase Act (2004)
UDP	Unitary Development Plan	Development Plan produced by metropolitan districts such as those in Greater Manchester. UDPs will be saved for a certain period of time following the Planning and Compulsory Act 2004 but will eventually be replaced by policies contained in documents within LDFs.

Glossary