Greater Manchester Minerals Plan: Submission

Sustainability Appraisal Report

November 2011

اگر انگریزی آپ کی مادری زبان نہیں اور آپکوان معلومات کا ترجمہ چاہیے یا یہ معلومات بڑے حروف، بریل (نابینا افراد کی تحریر)، بذریعہ ای میل یا آڈیو ٹیپ پر چاہئیں تو براہ مہربانی
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APPENDIX (Separate report)

A1 Significant Effects of the Aim
A2 Significant Effects of Minerals Plan Policies
A3 Significant Effects of the Mineral Safeguarding Areas Policy
A4 Significant Effects of the Development Management Policies

SUSTAINABILITY APPRAISAL OF THE GREATER MANCHESTER MINERALS PLAN PUBLICATION REPORT

1. NON TECHNICAL SUMMARY

1.1 Introduction

In August 2009, agreement was reached across the ten Greater Manchester authorities to prepare a joint Minerals Plan. The formal title of the Minerals Plan is the Greater Manchester Joint Minerals Development Plan Document (JMDPD). Work on the Minerals Plan is being co-ordinated by the Greater Manchester Geological Unit (GMGU) on behalf of each District. Once adopted, the Minerals Plan will set out the locations in Greater Manchester where mineral extraction may take place, safeguard minerals resources with potential for future extraction, and provide guidance on all aspects of environmental and resource protection including the sustainable transportation of minerals.

This Report outlines the findings of the Sustainability Appraisal (SA) of the Greater Manchester Minerals Plan Publication Report. It has been produced to accompany the Publication Report which is the subject of public consultation from 22nd July 2011 to 2nd September 2011.

SA 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.

This SA considers the potential implications of the Mineral Plan by assessing its Aim, Strategic Objectives and Policies against available baseline data and sustainability objectives and their sub-objectives. The findings of SA should be reflected in the adopted Minerals Plan to ensure that it maximises its contribution to future sustainability.

1.2 Requirement to Undertake a Sustainability Appraisal

Sustainable development is the core principle underpinning the planning system. In order to ensure that new plans and strategies contribute towards sustainable development, the Planning and Compulsory Purchase Act 2004 requires a Sustainability Appraisal to be carried out on all new or revised Development Plan Documents.

In addition, there is a need to comply with European Union Directive 2001/42/EC, which requires a formal Strategic Environmental Assessment (SEA) of plans and programmes that are likely to have a significant effect on the environment.

1.3 Sustainability Objectives

This SA Report considers the potential implications of the Minerals Plan by assessing the plan against a series of social, environmental and economic objectives. Accordingly, the establishment of these objectives is central to the SA process.

The SA Scoping Report for the Plan prepared by GMGU identified twenty SA objectives. These cover a range of issues, for example relating to encouraging sustainable economic growth, reducing the need to travel, improving access to good quality housing, protecting and improving local environmental quality, mitigating and adapting to climate change, and ensuring the prudent use of natural resources. In addition, a number of sub-objectives and indicators have been identified for each objective to assist with the assessment against the sustainability objectives.

1.4 Baseline Characteristics and Key Sustainability Issues

The review of plans, programmes and strategies, the analysis of the baseline data, and consultation with the public and statutory bodies enabled the following key sustainability issues to be identified:

- Greater Manchester is the second largest conurbation in the UK and its population is predicted to continue to increase over the duration of the Plan;
- In 2007, four Greater Manchester districts fell within the 50 most deprived in England (Manchester, Salford, Rochdale, Oldham);
- The GVA per head population for Greater Manchester is higher than the North West average but continues to lag behind the national average;
- Manchester contains a wide variety of habitats and there are three Special Areas of Conservation, one Special Protection Area, 21 Sites of Special Scientific Interest and 526 Sites of Biological Interest in the Plan area;
- In 1999, woodland covered 3.6% of the Plan area, an increase from 2.1% in 1980;
- Greater Manchester contains approximately 4,500 listed buildings and 224 Conservation Areas;
- Air Quality Management Areas have been declared in all ten Greater Manchester authorities;
- During the lifetime of the Minerals Plan, climate change may result an increase in flooding events; hotter, drier summers; and milder, wetter winters;
- Greater Manchester is not self-sufficient in terms of minerals;
- Sand and gravel deposits are found widely across Greater Manchester and extraction takes place in Bury, Salford and Stockport;
- Sandstone/gritstone is found in the north of the sub region and is associated with the Millstone Grit deposits;
- Clays and shales occur widely across the sub region. However, there has been a diminished requirement for the type of common brick once produced in Greater Manchester because of changes in the materials used in the construction industry;
- Natural building stone is extracted from just one quarry in Greater Manchester at Middle Hill in Rochdale;
- Peat in Greater Manchester is predominantly found in the districts of Wigan and Salford, in particular the raised peat bogs (known as 'mosses');

- Only one opencast coal mine remains in Greater Manchester (Cutacre); and
- Deep coal measures are located within the south of the sub-region.

1.5 Appraisal Results: Positive and Negative Effects

The SA 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
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.

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
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.

The inclusion of a cross-reference to the Key Planning and Environment Criteria contained within Policy 1 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 2, 3 and 4 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
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
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.

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.

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.

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.

1.6 Difference the Sustainability Appraisal Process has Made

The SA concluded that the Minerals Plan would have a positive impact on a wide range of sustainability objectives. The SA has however made several recommendations to improve the plan's performance against the SA framework.

The appraisal of the Publication version of the Minerals Plan has resulted in the wording of the Aim being strengthened to ensure that the environment and community are protected from the impacts of minerals development. It has also led to the policy relating to Unconventional Gas Resources being amended to reflect the fact that there may be instances where it is not desirable to restore the site to its original land use.

The SA process also recommended the inclusion of most versatile agricultural land and air quality within the list of environmental criteria to be considered when assessing proposals for minerals development and has resulted in revisions to the Restoration and Aftercare policy to ensure it incorporated a requirement for the final land use to provide for the enhancement of biodiversity assets, European sites and the ecological value of the site.

The SA noted that the policy relating to reworking of colliery spoil had the potential to have a negative impact on the objective relating to climate change. However, it is

recognised that national planning guidance stipulates that the planning system should not predetermine the appropriate levels of coal to be produced. In addition, it is acknowledged that the only alternative to incremental coal output in the UK is the importation of coal over long distances which would have a more significant negative impact on greenhouse gas emissions. Therefore, no mitigation is proposed to overcome this although it is recommended that the promotion of the use of sustainable modes of transporting coal out of Greater Manchester by the Plan will help address the secondary impacts.

1.7 Next Steps

This SA Report is being published alongside the Greater Manchester Minerals Plan Publication report to provide the public, statutory consultees and other stakeholders with an opportunity to express opinions on this SA Report and to use it as a reference point whilst commenting on the Minerals Plan Publication report. At this stage comments on the Plan itself should relate to whether the Minerals Plan is legally compliant and justified, effective and consistent with national planning policy.

Following consideration and analysis of the consultation responses received, the Minerals Plan will be submitted to the Planning Inspectorate for independent examination in December 2011. This SA report will form part of the evidence base that the Planning Inspector will refer to in order to assess the soundness of the Core Strategy.

Following the examination, the Inspector will issue a report to AGMA containing binding amendments that must be made to the Minerals Plan before it is legally adopted. A summary of the main issues raised on the SA, and how these were taken into account in the development of the plan and SA Report, will be produced as part of the adoption statement for the Minerals Plan.

The significant effects of implementing the Core Strategy will then be monitored.

1.8 How to Comment

This SA Report will be subject to a consultation period running from 22nd July 2011 to 2nd September 2011 alongside the Minerals Plan Publication Report. Comments are invited on the contents of the SA report, in terms of the appraisal methodology, the accuracy of the assessment of the likely significant effects of the plan and the opportunities for additional mitigation to ensure that the Minerals Plan is as 'sustainable' as possible.

Comments should be sent:

- By completing a registration process and submitting your comments through the online system at http://consult.gmwastedpd.co.uk/portal/wmpt/;
- By email, to: planningteam@gmmineralsplan.co.uk; or

- By post, to:
  Minerals Plan Team
  C/O GMGU
  Emerson House
  Albert Street
  Eccles
  M30 0TE.

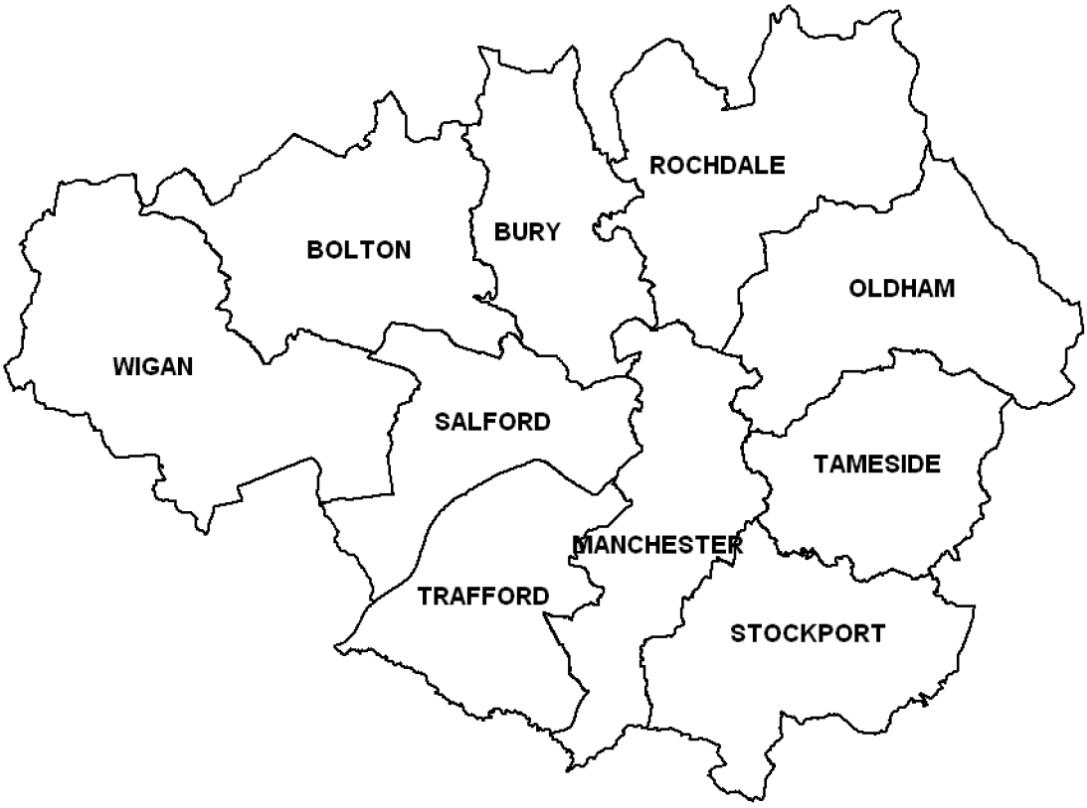
All comments should be received no later than 5.00pm on Friday **2nd September 2011**.

2. INTRODUCTION

2.1 Purpose of the Report

The sub-region of Greater Manchester was established in 1974 and consists of ten unitary authorities: Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan.

Figure 1: The Greater Manchester Area



In September 2004, the Planning and Compulsory Purchase Act came into effect and introduced the requirement for local planning authorities to produce a Local Development Framework (LDF) to deliver the spatial planning strategy for their area. The LDF is not a single plan but instead comprises of a series of individual Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs) on specific subject areas.

In August 2009, agreement was reached across the ten AGMA Authorities of Greater Manchester: Bolton MBC; Bury MBC; Manchester CC; Oldham MBC; Rochdale MBC; Salford CC; Stockport MBC; Tameside MBC; Trafford MBC and Wigan MBC to prepare a joint DPD for minerals. The formal title of the Minerals Plan is the Greater Manchester Joint Minerals Development Plan Document (JMDPD). The Minerals Plan will form part of the LDF for each of the 10 Greater Manchester Districts. Once adopted, it will replace the existing minerals policies in each individual authority's Unitary Development Plan (UDP).

Work on the Minerals Plan is being co-ordinated and managed by the Greater Manchester Geological Unit (GMGU) on behalf of each District. In addition, a Joint Committee has been established to act as an Executive, with responsibility for approval of the document except at the publication and adoption stages, at which point the Minerals Plan must be agreed by each District's Full Council, with delegated approval by the Joint Committee at submission. The Joint Committee will be supported by a Steering Group consisting of officers from each of the Districts.

The Minerals Plan will provide 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 and resource protection, including the sustainable transportation of minerals.

Sustainable development is the core principle underpinning the planning system and, as a consequence, sustainability will be at the heart of the Minerals Plan. In order to ensure that new plans and strategies contribute towards sustainable development, the Planning and Compulsory Purchase Act 2004 requires a Sustainability Appraisal (SA) to be carried out on all new or revised DPDs.

The purpose of this SA is to promote sustainable development through the integration of sustainability considerations into the preparation, adoption and implementation of the Minerals Plan. SA does not constitute a separate stage in the production of the Minerals Plan but instead represents an iterative, on-going process that forms an integral part of the plan-making process. It involves the identification, evaluation and reporting of the social, environmental and economic impacts of the plan. In doing so, it provides an opportunity to consider ways in which the Minerals Plan can make an effective contribution to sustainable development and provides a means of avoiding or reducing any adverse effects that the plan might have.

This report outlines the findings of the SA of the Greater Manchester Minerals Plan Publication report. It appraises the Minerals Plan against baseline data and sustainability objectives in order to assess the plan's impact on economic, social and environmental aims. It is being issued for consultation alongside the Minerals Plan to provide the public, statutory consultees and other stakeholders with an opportunity to express opinions on this report and also to use it as a reference point whilst commenting on the Minerals Plan Publication report. It should be read alongside the previous SA reports issued for consultation.

2.2 Requirement for SA / SEA

Under Section 19(5) of the Planning and Compulsory Purchase Act 2004, where a Local Planning Authority is preparing a Development Plan Document it is mandatory for the plan to be subject to SA throughout its production, to ensure that it is fully consistent with, and helps to implement, the principles of sustainable development. The SA performs a key role in providing a sound evidence base for the plan and provides a means of demonstrating to decision makers, and the public, that it is the most appropriate given reasonable alternatives.

In parallel with this, the European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment" (the Strategic Environmental Assessment or 'SEA Directive'), which is transposed into United Kingdom law by the Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA Regulations'), introduced a statutory obligation to conduct an environmental assessment of certain plans. The Regulations apply to a range of UK plans and programmes prepared by public bodies, including the Minerals Plan which meets the relevant criteria in that:

- It is "prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and is required by legislative, regulatory or administrative provisions" (Article 2(b)); and
- It concerns "town and country planning or land use… which sets the framework for future development consent of projects" (Article 5.2(a)).

While SA and SEA are distinct processes, many of their requirements overlap. As a consequence, the Government has prepared guidance[1] which advises that an integrated approach to SA and SEA should be pursued, so that the SA process also meets the requirements of the SEA Directive and Regulations. This involves extending the breadth of (predominantly environmental) issues required to be considered under SEA to cover the full range of aspects (including social and economic) for sustainability.

In accordance with this guidance, this SA Report meets the SEA requirements, and acts as the 'environmental report' for the purposes of Regulation 12 of the Environmental Assessment of Plans and Programmes Regulations 2004. Throughout this report, all references to SA should be taken to include the requirements of European Directive 2001/42/EC.

2.3 Compliance with these Requirements

As outlined in section 2.2, sustainability appraisals of Development Plan Documents should also fully incorporate the requirements of the SEA Directive, which are transposed into English law by the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations). While SEA and SA are distinct processes, the intention of this SA is to adopt an approach to appraisal which also meets the requirements of the SEA Directive and Regulations. The following table shows how this report meets the requirements of the SEA Directive.

[1] Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents: Guidance for Regional Planning Bodies and Local Planning Authorities – ODPM, November 2005.

Table 1: Compliance with the SEA Directive

Information to be included in an Environmental Report under the SEA Regulations	Relevant sections in the SA Report
An outline of the contents, main objectives of the plan and its relationship with other relevant plans and programmes.	3.2 3.4 – 3.6
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan.	3.3
The environmental characteristics of areas likely to be significantly affected.	3.3
Any existing environmental problems which are relevant to the plan, including in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.	3.3 3.8
The environmental protection objectives, established at international, Community or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation.	3.3 3.5
The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soils, water, air, climatic factors, material assets, cultural heritage, landscape, and the interrelationship between the above factors.	4.1 – 4.5 Appendix Report
The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan.	4.6 Section 6 Appendix Report
An outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including any difficulties.	3.1 3.7
A description of measures envisaged concerning monitoring.	5
A non-technical summary of the information provided above.	1

2.4 Key Stages of the SA in Relation to the Minerals Plan

SA provides a means to assess the economic, social and environmental effects of a plan at various points during its preparation. It is not a one-off event in the preparation of a plan; instead, it should be undertaken in tandem with the plan preparation process and feed into its development at appropriate points.

The first formal stage in the SA process was the production of a SA Scoping Report, which was published for consultation in November 2009. This Scoping Report defined the Sustainability Framework (consisting of a series of sustainability objectives, sub-objectives and indicators) and set out the methodology that would be used to inform the process of SA throughout the different stages in the production of the Minerals Plan. Details on how the SA has been applied during various stages of the plan preparation process are provided below.

Minerals Plan Issues and Options Report (February 2010)
The SA process concluded that the Minerals Plan Issues and Options Report had the potential to deliver a wide range of social, environmental and economic benefits. Nevertheless, it also identified several instances where options had the potential to have a negative impact on sustainability objectives, a number of uncertain impacts and a range of opportunities for further enhancements to the Plan's sustainability.

The SA concluded that the proposed aim was particularly compatible with the objectives relating to exploiting the growth potential of business sectors; encouraging sustainable economic growth; and ensuring the prudent use of natural resources. However, due to the potential environmental impacts associated with aggregate recycling operations, it was envisaged that the proposed aim would have an uncertain impact on health, the quality of controlled waters and air quality.

Whilst the proposed approach to known surface-coal resources was considered to have a relatively mixed impact on the sustainability objectives, it was concluded that the proposed approach to peat would have a largely positive impact on the sustainability objectives, particularly those relating to biodiversity and habitats; mitigating climate change; and ensuring the prudent use of natural resources.

The appraisal envisaged that all three potential approaches to releasing additional aggregate resources would have a positive impact on a wide-range of environmental objectives. However, it considered that releasing additional aggregate resources through extensions to existing sites would have an uncertain impact on the objectives relating to exploiting the growth potential of business sectors; sustainable economic growth; and the prudent use of natural resources due to the proposed approach potentially leading to important aggregate resources being unexploited.

The SA considered that the Development Management policies contained within the Issues and Options report would have a relatively mixed impact on the sustainability objectives. It was envisaged that the proposed approaches to Mineral Safeguarding Areas and Other Mineral Plan Allocations would have a positive impact on the objectives relating to the prudent use of natural resources; exploiting the growth potential of business sectors; and encouraging sustainable economic growth. Conversely, it was concluded that the proposed approach to Areas of Search had the potential to have a negative impact on the prudent use of natural resources, air quality, minimising the need to travel, encouraging sustainable economic growth and exploiting the growth potential of business sectors.

The proposed approach to aftercare was considered to have a positive impact on a wide range of sustainability objectives, particularly those relating to developing and marketing Greater Manchester's image; protecting and improving landscape and townscape character; and restoring and protecting land and soil. In contrast, the proposed approach to reworking coal spoil tips would have had a relatively mixed impact on the sustainability objectives.

Minerals Plan Preferred Approach Report (September 2010)
The SA of the Preferred Approach report established that the Plan would have a positive impact on a wide range of sustainability objectives. Nevertheless, a number of negative and uncertain impacts were also identified.

The SA of the proposed aim contained within the Preferred Approach report concluded that the aim would have a positive impact on a range of sustainability objectives, particularly those related to exploiting the growth potential of business sectors; encouraging sustainable economic growth; and ensuring the prudent use of natural resources. It was however considered that although the aim would not have any negative effects on the sustainability objectives, its impact on the objectives relating to physical and mental health, the quality of controlled waters and air quality was uncertain.

The SA concluded that the preferred approaches to brick clay, peat, primary aggregates and building stone would largely have a positive impact on the sustainability objectives. It was also considered that the preferred approach to Areas of Search would result in the exclusion of a considerable number of natural and built assets from the Areas of Search and would thereby have a positive impact on a wide range of environmental objectives. In contrast, the proposed approach to known surface-coal resources would have a mixed impact on the sustainability objectives. Whilst it would impact positively on several economic and environmental objectives, it could potentially have a negative effect on the objectives relating to climate change; energy use; air quality; and reducing the need to travel.

By preventing the sub-region's mineral resources from being sterilised unnecessarily, the preferred approach to Mineral Safeguarding Areas was considered to have a major positive effect on the objective of ensuring the prudent use of natural resources and some positive impact on several other environmental and economic objectives.

In relation to the Development Management policies contained within the Preferred Approach report, the approaches to unallocated sites and the transportation of minerals were both considered to impact positively on a number of the sustainability objectives. Similarly, the preferred approach to aftercare and restoration would have a range of positive impacts, particularly on the environmental objectives. However, as the potential afteruses of sites are unknown, it is difficult to appraise the impact of the preferred approach to aftercare and restoration on a wide range of sustainability objectives.

2.5 Feedback from Consultation

In November 2009, a SA Scoping Report was produced to set out the context and SA objectives for the Minerals Plan, establish baseline data and set the scope as to how the Minerals Plan will be assessed against social, environmental and economic aims. The aim was to ensure that the SA was comprehensive and would address all relevant issues and objectives, by enabling input from key stakeholders and consultation bodies at an early stage in the process.

In particular, the Scoping Report provides an initial assessment of:

- The relationship between the Minerals Plan and other relevant plans and programmes;

- The current environmental, social and economic baseline and any trends; and
- The likely key sustainability issues.

Consultation on the SA Scoping Report took place between 27th November 2009 and 8th January 2010. Comments were invited from the consultation bodies required by the SEA Regulations – the Environment Agency, English Heritage and Natural England[2]. A range of other social, economic and environmental stakeholders were consulted directly on the SA Scoping Report including:

- 4 North West
- Government Office for the North West
- The Planning Inspectorate
- Local and County Councils and Parishes adjacent to Greater Manchester borders
- The Strategic Rail Authority
- Relevant Local Authorities in the Joint Plan area
- Highways Agency
- The North West Regional Development Agency
- The Strategic Health Authority and local health providers
- Relevant Sewage and Water Companies
- Greater Manchester Passenger Transport Unit
- Greater Manchester Archaeological Unit
- Greater Manchester Ecology Unit
- Greater Manchester Transportation Unit
- The Woodland Trust
- Red Rose Forest
- Mersey Basin Campaign
- Lancashire Wildlife Trust
- RSPB
- Relevant Community Groups
- Manchester Airport and other relevant Aerodromes.

The main comments from consultation on the SA Scoping Report were the need to:

- Review additional relevant plans, policies and programmes to identify their implications for the Minerals Plan;
- Make a number of additions or amendments to the SA objectives and sub-objectives;
- Include additional information and key messages relating to landscape character and quality, biodiversity, geodiversity, public access to the natural environment, green infrastructure and climate change; and
- The need to take into account possible changes to the aggregate apportionment across the North West.

The SA Scoping report was updated to address these comments.

The Minerals Plan Issues and Options Report together with its accompanying SA Report was consulted upon between February and March 2010. A schedule of the

[2] The SEA Regulations require the Environment Agency, English Heritage, English Nature and the Countryside Agency to be consulted on the scope of sustainability appraisals. However, the Natural Environment and Rural Communities (NERC) Act merged the Countryside Agency and English Nature to form a new agency - Natural England.

comments received on the Minerals Plan Issues and Options Report together with GMGU's response to them is provided in the Minerals Plan Issues and Options Outcome Report which is available at www.gmmineralsplan.co.uk. Comments were received on the SA report from the Environment Agency and Natural England. The main comments related to:

- The need to recognise that whilst restricting peat extraction to sites that are already developed would mitigate climate change compared to unregulated peat extraction, there will still be significant negative climate change impacts;
- The need to refer to landscape and transport issues in the section of the SA Report that relates to Baseline Characteristics and Key Sustainability Issues;
- The need to ensure that the references made to 'Appropriate Assessment' in the SA report should instead be to the 'Habitats Regulations Assessment' as this refers to the whole process.

The Minerals Plan Preferred Approach Report together with its accompanying SA Report was consulted upon between 15th October 2010 and to 26th November 2010. A schedule of the comments received on the Minerals Plan Preferred Approach Report together with GMGU's response to them is provided in the Minerals Plan Issues and Options Outcome Report which is available at www.gmmineralsplan.co.uk. Comments were received on the accompanying SA report from Natural England and Coal Pro. The main comments related to:

- The need for the non-technical summary that accompanies the next iteration of the SA to provide an outline of the reasons for selecting the alternatives dealt with;
- The need for Section 3.1 to outline the development of the Preferred Approaches and Policy Directions from the initial options;
- The need to ensure that all SA indicators are quantifiable and the need to amend the indicator for SA objective 20 from the 'number of restored sites which use renewable energy' to the proportion of renewable energy used by restored sites.
- The need to recognise that the only alternative to any incremental coal output in the UK is the import of coal over long distances and that the carbon emissions associated with the transport of coal over such distances exceed those associated with indigenous coal production many times over.

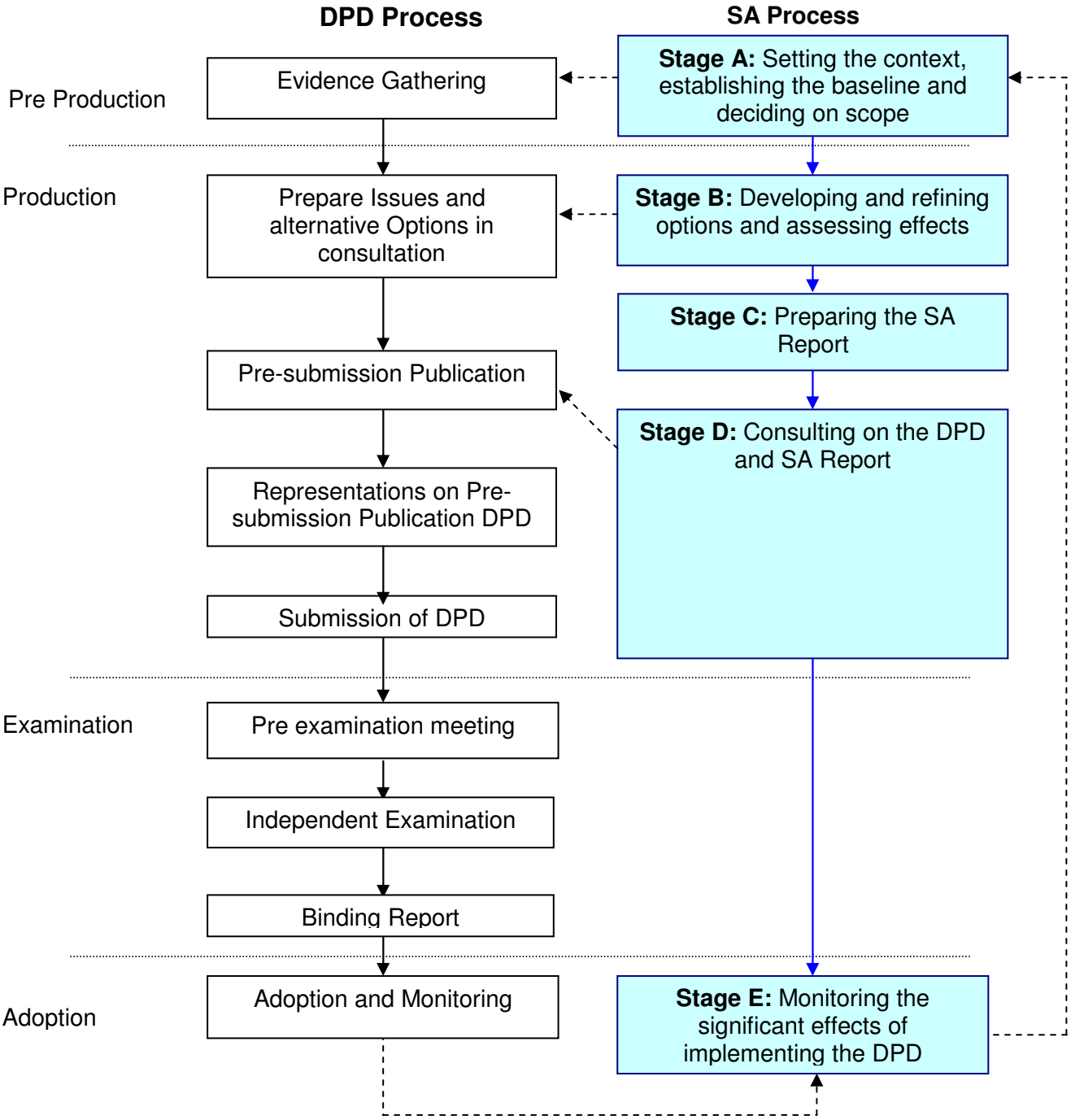
These comments have been taken into account when undertaking this SA of the Minerals Plan Publication report. Specifically, the development of the Preferred Approaches and Policy Directions from the initial options is outlined in section 3.1 of this report and revised SA indicators have been provided for SA objectives 12, 19 and 20 to ensure they are quantifiable. In addition, the appraisal of the reworking colliery spoil tips and unconventional gas resources policies acknowledge that the importation of energy minerals from outside the UK would have a markedly greater impact on greenhouse gas emissions than extracting these minerals from within the sub-region.

3. METHODOLOGY

3.1 Overall Approach

The approach adopted to undertake the SA was based on the process set out in the Office of the Deputy Prime Minister (ODPM) Guidance Paper "Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents" November 2005. This guidance advocates the following process to undertaking SA:

Figure 2: DPD and SA preparation process



There are five stages in the SA process. GMGU undertook the first stage (Stage A), identifying the initial scope of the SA, in November 2009. In conjunction with key stakeholders, GMGU identified and reviewed relevant plans, policies and programmes that will affect and influence the Minerals Plan; set out relevant social, environmental and economic baseline information; identified the key sustainability issues for the SA to address; established an SA Framework consisting of sustainability objectives, indicators and targets; and produced a Scoping Report for consultation on the scope of the appraisal.

As part of Stage A of the SA process, twenty sustainable development objectives were established for appraising the Minerals Plan. The establishment of these SA objectives and criteria is central to the SA process. The SA framework, based on these objectives, provides a way in which sustainability effects are described, assessed and compared. Sustainability objectives are distinct from those of the Minerals Plan itself.

The sustainability objectives used for the SA of the Minerals Plan were drawn from the sustainability issues identified through the analysis of the baseline data and review of other plans and strategies set out in the SA Scoping Report. They cover a range of issues, for example relating to exploiting the growth potential of business sectors, encouraging sustainable economic growth, reducing the need to travel, improving access to good quality housing, protecting and improving local environmental quality, mitigating and adapting to climate change, and ensuring the prudent use of natural resources. In addition, fifty-eight sub-objectives have been identified to assist with the assessment against the sustainability objectives.

The SA Framework can be found in the accompanying Sustainability Appraisal Appendices report, which is available at www.gmmineralsplan.co.uk.

Reasons for Selecting Alternatives

The development of the Minerals Plan from the Initial Options and Preferred Approach can be seen as one of gradual refinement of the initial options informed by feedback from consultation and additional information gathered as part of the plan-making process as well as feedback from the SA of the emerging plan.

An example of this is the Aim and Objectives of the Plan. The wording in the Plan represents a refinement of that in the Initial Options and Preferred Approach reports. Throughout the plan preparation process commentary has been provided on why certain suggestions, such as a waste objective, are better dealt with elsewhere.

The Spatial Strategy first appeared in the Preferred Approach building on the three themes of the refined objectives: transport, environment and future locations for mineral working.

The Initial Options consultation confirmed the North West aggregates apportionment as the key data source on which to base the aggregates policy. As far as brick clay is concerned it was decided not to identify any sites for extraction because of a lack of detailed geographic knowledge about the resource.

A similar approach was developed for natural building stone which was not to identify any sites because no information came forward on specific sites and there appear to

be no historic buildings that rely on stone from active or historic quarries in Greater Manchester for conservation and repair. However, due to representations on the Preferred Approach report, it was decided that the Minerals Plan should include a policy on building stone in the plan and seek to safeguard former or inactive quarries that could have a role in producing stone for the repair of historic buildings.

Proposals for energy minerals developed significantly in the Preferred Approach influenced largely by feedback from consultation. A policy on coalbed methane was widened to 'Unconventional Gas Resources' to include coalmine methane and shale gas resources. Environmental criteria were also added to the policy at the Preferred Approach stage. No policies for coal were developed because the data to identify broad Areas of Search was not available.

The lack of data also determined that no Area of Search should be identified for clay. No sites for peat were allocated having regard to the adequacy of existing planning permissions, the implications for climate change of additional extraction and national advice to reduce peat extraction in favour of more sustainable alternatives.

The complexity of identifying a Mineral Safeguarding Area for an urban area like Greater Manchester resulted in a combination of the options identified at Issues and Options being chosen as the preferred approach. This was to safeguard areas both inside the urban area (with limitations) and outside.

Consultation had a key influence on promoting a policy on the transport of minerals which was not originally proposed in the Issues and Options but received considerable positive support at consultation. The publication version of the Plan therefore not only contains a policy on the sustainable transportation of minerals but also includes a policy that seeks to safeguard existing minerals infrastructure, such as wharves and rail-linked depots.

Consultation at Issues and Options reinforced both the benefits of having a policy on the Reworking of Colliery Spoilt Tips and the importance of having safeguards for the environment and the local community in the Preferred Approach.

The Issues and Options consultation asked a series of questions about how best to safeguard minerals allocations and related infrastructure. The Preferred Approach reflected this approach with a policy designed to protect both allocations and infrastructure unless they are no longer required or there is an overriding need for the development.

The Preferred Approach to Restoration and Aftercare reflects the support at Issues and Options consultation for the outline policy with few changes being made as a result.

3.2 Links to other Plans, Programmes and Strategies

Stage A of the SA process initially involves establishing the context in which the Minerals Plan is being prepared, namely the other plans, programmes and strategies that influence its content (and vice-versa) and the opportunities and challenges they present. The SEA Directive specifically requires environmental objectives established at international, European Community or national levels to be taken into account in

developing the Minerals Plan. However, in order to facilitate a comprehensive approach and maximise its sustainability, guidance on SA recommends that this should be widened to consider how the Plan can support the full range of other plans, policies and programmes that already exist, including at the regional, sub-regional and local levels, taking into account their economic and social as well as environmental objectives.

In reviewing these plans, policies and programmes the aim is to identify their implications for the Minerals Plan to ensure that the relationship between these documents and the Minerals Plan has been fully explored. This will in turn ensure that the plan is able to exploit potential synergies and address any identified inconsistencies between international, national, regional and local objectives.

Table 3 below shows a list of the plans, policies and programmes that were reviewed as part of the SA. The full review is provided in the SA Scoping Report for the Minerals Plan (November 2009), which is available at www.gmmineralsplan.co.uk.

Table 3: List of all Plans, Programmes and Strategies reviewed as part of the SA

INTERNATIONAL
• The World Summit on Sustainable Development (WSSD), Johannesburg, September 2002 • Kyoto Climate Change Protocol (1997) • Ramsar Convention – Convention on Wetlands of International Importance (Treaty signed in 1971) • EU Habitats Directive, EC Directive 92/43/EEC • The Water Framework Directive (WFD) 2000/60/ED • EU Mining Waste Directive (2006) • European Spatial Development Perspective • European Landscape Convention
NATIONAL
• Planning (Listed Buildings and Conservation Areas) Act 1990 • Ancient Monuments and Archaeological Areas Act 1979 • The Historic Environment - A Force for our Nature • Climate Change Act (2008) • The UK Low Carbon Transition Plan – National Strategy for Climate and Energy (2009) • A Strategy for England's Trees, Woods and Forests (2007) • Securing the Future: UK Sustainable Development Strategy (2005) • Underground, Under Threat – Groundwater Protection: Policy and Practice (GP3) • Mineral Extraction and the Historic Environment – Natural England • Wildlife and Countryside Act (as amended) 1981 • Circular 04/2001 – Countryside and Rights of Way Act 2000 DETR • Natural Environment and Rural communities Act (2006) • Conservation (Natural Habitats & C.) (Amendment) Regulations (2007) • PPS 1 Delivering Sustainable Development • PPS 1 (Supplement) Planning and Climate Change • PPG 2 Green Belts • PPS 7 Sustainable Development in Rural Areas • PPS 9 Biodiversity and Geological Conservation • Planning for Biodiversity and Geological Conservation: A Guide to Good Practice • PPS 10 Planning for Sustainable Waste Management • PPS 12 Local Spatial Planning • PPG 13 Transport. • PPG 15 Planning and the Historic Environment • PPS15 Planning for the Historic Environment (Consultation Paper) • PPG 16 Archaeology and Planning • PPG 17 Planning for Open Space, Sport and Recreation • PPS 23 Planning and Pollution Control • PPG 24 Planning and Noise

- PPS 25 Development and Flood Risk
- Minerals Policy Statement 1: Planning and Minerals (MPS1)
- MPG2: Applications, Permissions and Conditions
- MPS2: Controlling and Mitigating Environmental Effects of Mineral Extraction in England
- MPG5: Stability in Surface Mineral Workings and Tips
- MPG7: Reclamation of Mineral Workings
- MPG8: Planning and Compensation Act 1991: Interim Development Order Permissions (IDOs) – Statutory Provisions and Procedure
- MPG9: Planning and Compensation Act 1991: Interim Development Order Permissions (IDOs) – conditions
- MPG10: Provision of Raw Material for the Cement Industry
- MPG13: Guidelines for Peat Provision in England
- Strategic Rail Freight Network – The Long Term Vision
- Guidance for Local Authorities on Implementing the Biodiversity Duty
- Climate Change and Biodiversity Adaptation: the Role of Spatial Planning
- Biodiversity by Design: A Guide for Sustainable Communities
- Geological Conservation Review
- First Soil Action Plan 2004 – 2006
- Open Space Strategies – Best Practice Guidance
- Natural England's Green Infrastructure Guidance
- Accessible Natural Green Space Standards in Towns and Cities
- By All Reasonable Means: Inclusive Access to the Outdoors for Disabled People
- The Countryside in and around Towns: A Vision for Connecting Town and Country in Pursuit of Sustainable Development.

REGIONAL

- North West of England Plan Regional Spatial Strategy to 2021
- The North West Transport Strategy
- Regional Waste Strategy for the North West
- North West Regional Freight Strategy
- Regional Economic Strategy
- RS2010 Regional Strategy for England's Northwest (Principles and Issues Paper)
- North West Green Infrastructure Guide
- Embedding Regional Biodiversity Targets into Local Development Frameworks

SUB – REGIONAL

- Prosperity for All - The Greater Manchester Strategy
- An Ecological Framework for Greater Manchester
- Greater Manchester Biodiversity Action Plan
- Towards a Green Infrastructure - Framework for Greater Manchester
- Greater Manchester Local Transport Plan 2 (2006 - 2010/11)
- The Greater Manchester Air Quality Strategy and Action Plan
- The Manchester City Region Development Programme
- Greater Manchester Economic Development Plan
- Draft Local Geodiversity Action Plan (LGAP) for Greater Manchester

LOCAL

- Bolton Landscape Character Appraisal
- Bolton Metropolitan Borough Council: BAP
- Bolton Urban Historic Landscape Characterisation (Interim report - 2008)
- Bolton's Green Corridors
- Bolton Metropolitan Borough Council: Community Strategy (2003-2012)
- Bolton MBC Core Strategy
- Bolton UDP
- Bury Heritage Strategy
- Bury's Community Strategy 2008-2018
- Bury Wildlife Strategy
- Bury MBC Core Strategy Preferred Options
- Bury UDP
- Manchester Biodiversity Strategy
- South East Manchester Multi Modal Study
- The Manchester Way – Manchester's Community Strategy (2006-2015)

- Manchester CC Core Strategy Refining Options
- Manchester UDP
- Oldham's Community Strategy (2008-2020)
- Oldham MBC Travel Plan (2008-2010)
- Oldham MBC Green Space Strategy
- Oldham MBC Core Strategy Preferred Options
- Oldham UDP
- The Community Strategy for Rochdale Borough (2007-2010)
- Rochdale Cultural Strategy (2003 -2008)
- Rochdale MBC Core Strategy Issues and Options
- Rochdale UDP
- Salford City Council: Community Strategy (2006-2016)
- Salford Economic Development Strategy (2004 -2007)
- Salford City Council Core Strategy Issues and Options Report
- Salford UDP
- Stockport Conservation Strategy
- Gateway to the future: Stockport Regeneration Strategy
- Stockport MBC: Community Strategy (2003-2013)
- Stockport MBC Core Strategy Issues and Options
- Stockport UDP
- Draft Tameside MBC Sustainable Community Strategy (2009-2019)
- A Nature Conservation Strategy for Tameside
- A Trees and Woodlands Strategy for Tameside
- Tameside UDP
- Action for Nature in Trafford
- Trafford Community Strategy: Trafford 2021
- Trafford MBC Core Strategy
- Trafford UDP
- Wigan's Heritage: A strategy for Wigan 2003 – 2007
- Wigan MBC: Community Plan (2005-2010)
- Wigan's Biodiversity Strategy
- Wigan MBC Core Strategy
- Wigan UDP

3.3 Baseline Characteristics and Key Sustainability Issues

The collection and analysis of baseline information is a key component of the SA process and a legal requirement under the SEA Directive. It facilitates the identification of the key sustainability issues that need to be taken into account when developing a plan and assists in the formation of objectives, indicators and targets for the plan. Baseline data also provides the information necessary to assist in predicting and monitoring the effects of a plan.

For the Minerals Plan, existing data was obtained from a number of different sources, including relevant information held by the Joint Authorities to provide the information base for their Local Development Frameworks, Annual Monitoring Reports and SA Scoping Reports (where available). In addition, some information was drawn from the Regional Spatial Strategy (RSS) Scoping Report for the North West.

The major social, environmental and economic issues identified for Greater Manchester are:

- With a population of over 2.5 million, Greater Manchester is the second largest conurbation in the UK and its population is predicted to continue to increase over the duration of the Plan;

- In 2007, four Greater Manchester districts fell within the 50 most deprived in England (Manchester, Salford, Rochdale, Oldham), with Manchester being the fourth most deprived district in England. Despite this, there are pockets of affluence, particularly in South Manchester;
- Eight Greater Manchester districts have a Standardised Mortality Ratio higher than the England/Wales average;
- The GVA per head population for Greater Manchester is higher than that of the North West average but continues to lag behind the national average;
- Whilst Greater Manchester contains large swathes of urban areas, the natural landscape is very important for biodiversity and people, and there are a variety of habitats, including ancient woodlands, moorlands, mosses, broadleaf woodland, rivers and ponds, and bogs.
- There are three Special Areas of Conservation (South Pennine Moors, Manchester Mosses and the Rochdale Canal) and one Special Protection Area (South Pennine Moors) in the Plan area;
- There are 21 Sites of Special Scientific Interest (SSSI) in the Plan area, of which 51.07% (up from 29.8% in 2006) of their area meets the target of being in 'favourable' or 'unfavourable recovering' condition, compared with the national target of 95% by 2010. Only 7.94% of the total area of SSSI in Greater Manchester was considered 'favourable';
- Greater Manchester contains 526 Sites of Biological Importance (SBI) of which 142 are Grade A, 202 are Grade B and 180 are Grade C;
- In 1999, woodland covered 3.6% of the Plan area, an increase from 2.1% in 1980;
- Greater Manchester's built environment contains approximately 4,500 listed buildings and 224 Conservation Areas. In addition, there are a number of Scheduled Ancient Monuments and registered historic parks and gardens;
- Air quality in Greater Manchester is poorer than elsewhere in the North West. Air Quality Management Areas have been declared in Bolton, Bury, Manchester, Oldham, Stockport, Tameside and Trafford for nitrogen dioxide and particulate matter 10, and in Rochdale, Salford and Wigan for nitrogen dioxide only;
- During the lifetime of the Minerals Plan, climate change may result an increase in flooding events, stormier weather, hotter and drier summers, and milder, wetter winters;
- There is a need to provide, conserve and maintain access to green and open spaces and Rights of Way;
- Sand and gravel deposits are found widely across Greater Manchester and extraction takes place in Bury, Salford and Stockport. However, economic extraction can be difficult due to the presence of mudstone and coal fragments;
- Sandstone has also been used as a traditional building stone in Greater Manchester. Sandstone/gritstone is found in the north of the sub region and is associated with the Millstone Grit deposits;
- There are a number of construction and demolition waste recycling depots in the sub-region, which are located in close proximity to the urban areas;
- Clays and shales occur widely across the sub region. However, there has been a diminished requirement for the type of common brick once produced in Greater Manchester because of changes in the materials used in the construction industry;

- Natural building stone is extracted from just one quarry in Greater Manchester at Middle Hill in Rochdale;
- Peat in Greater Manchester is predominantly found in the districts of Wigan and Salford, in particular the raised peat bogs (known as 'mosses') located there. A certain level of extraction occurs in the present day;
- A number of coal mines operated within Greater Manchester in the past; nowadays just one opencast site remains (Cutacre);
- Deep coal measures within Greater Manchester are located within the south of the sub-region; and
- Greater Manchester is not self-sufficient in terms of minerals. The sub-region will therefore have continuing dependence on importing primary minerals from neighbouring counties.

3.4 Sustainability Appraisal Objectives

The SA appraises the potential implications of the Minerals Plan from a social, environmental and economic perspective. SA is fundamentally based on an objectives-led approach whereby the potential impacts of a plan are gauged in relation to a series of objectives for sustainable development. The establishment of these objectives is therefore central to the SA process as it provides the methodological yardstick against which the sustainability effects of the Minerals Plan can be described, assessed and compared.

Drawing upon the identified sustainability issues, the SA Scoping Report for the Plan identified twenty SA objectives. In addition, a number of sub-objectives have been identified for each objective to assist with the assessment against them. These objectives and their sub-objectives are listed below.

The objectives have been designed to be fully comprehensive, whilst minimising any overlap between individual objectives that could potentially cause confusion and skew the results of any appraisal.

ECONOMIC OBJECTIVES

1 To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.

- To diversify the economy in terms of the minerals sector
- To promote growth in the minerals sector
- To enable new and innovative mineral extraction technologies to be developed and utilised.
- To encourage the development of markets for recycled/secondary products.
- To minimise the production of waste.
- To increase mineral re-use and recycling.

2 To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance.

- To encourage sustainable economic growth through provision of adequate mineral reserves.
- To promote re-use and recycling of existing materials.

3 To develop and market Greater Manchester's image.

- To support the preservation and/or enhancement of high quality built, natural and historic environments.
- To promote the area as a destination for short and long term visitors, for residents and investors.

4 To develop and maintain a healthy labour market.

- To address the skills gap and enable skills progression.
- To provide a broad range of jobs and employment opportunities.

SOCIAL OBJECTIVES

5 To reduce the need to travel, improve choice and use of sustainable transport modes.

- Increase sustainable transport use (water and rail).
- To encourage walking, cycling and the use of public transport.
- Minimise transportation of minerals where possible.

6 To improve physical health and mental health and reduce health inequalities.

- To reduce deaths in key vulnerable groups.
- To promote healthier lifestyles.
- To reduce health inequalities among different groups in the community.
- To reduce the impact of nuisances associated with minerals development (such as dust, highway safety, noise, etc.).

7 To improve access to good quality affordable and resource efficient housing.

- To support the development and operation of resource efficient housing.

8 To enable groups and communities to contribute to decision-making, and to reduce social exclusion.

- To identify and engage with hard to reach stakeholders.
- To encourage wider community involvement in the design or the provision of services.
- To enable the community to contribute to and have influence in decision-making and be involved in its implementation.

9 To improve access to and use of basic goods, services and amenities for all groups.

- To improve access to cultural, sporting and leisure facilities, including natural green spaces.
- To improve access to essential services and facilities, including waste recycling facilities.
- To improve the range and quality of cultural, sporting and leisure facilities.
- To improve access to basic goods, promoting the use of those that are locally sourced.

ENVIRONMENTAL OBJECTIVES

10 To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.

- To protect and enhance the character and appearance of archaeological sites, historic buildings, conservation areas, townscape, landscape, parks and gardens and their settings.

11 To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.

- To protect and enhance the biodiversity of the region's landscapes.
- To protect and enhance existing designated wildlife and geological sites and species populations.
- To protect and enhance habitats and species, providing opportunities for new habitat creation and reversing the fragmentation of wildlife corridors.
- To increase the economic benefit derived from the region's natural environment.

12 To protect and improve landscape and townscape character and accessibility.

- To protect and enhance the accessibility of the landscape across the region.
- To protect and enhance the character and appearance of the region's countryside, maintaining and strengthening local distinctiveness and sense of place.
- To protect and enhance the character and appearance of archaeological sites, historic buildings, conservation areas, townscape, landscape, parks and gardens and their settings.

13 To protect and improve local environmental quality and reduce crime.

- To reduce light and noise pollution and crimes such as fly tipping.

14 To protect and improve the quality of controlled waters.

- To maintain and enhance ground and surface water quality.

15 To protect and improve air quality.

- To maintain and improve local air quality.
- To address the causal factors of poor air quality in Air Quality Management Areas.

16 To restore and protect land and soil and to manage contaminated and potentially unstable land.

- To reduce the amount of derelict, contaminated, degraded and vacant/underused land.
- To encourage the development of brownfield land for minerals sites in preference to greenfield and where such sites have significant biodiversity, agricultural or geological interest, to retain or incorporate this interest into any development.
- To reduce the loss of good soils to development.
- To maintain and enhance soil quality.
- To restore mineral sites to appropriate after uses.

17 To mitigate and adapt to climate change.

- To contribute to the ability to adapt to the impacts of climate change.
- To reduce or minimise greenhouse gas emissions.

18 To minimise the risk of flooding and increase the use of SUDS.

- To maintain water abstraction, run-off and recharge within carrying capacity.
- To reduce or manage flooding.

19 To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.

- To minimise the demand for raw material.
- To support the repair and re-use of existing buildings.
- To promote the use of locally arising recycled and secondary materials.
- To safeguard and use mineral resources wisely.

20 To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.

- To minimise the need for energy.
- To maximise the production and/or use of renewable energy.
- To increase energy efficiency (e.g. resource efficiency in buildings, considering energy efficiency targets for new developments, transport modes, etc.)
- To minimise the use of fossil fuels.
- To reduce or minimise greenhouse gas emissions.

3.5 Objectives of the Minerals Plan

A series of specific objectives for the Minerals Plan have been developed through extensive consultation with the public, statutory consultees and other stakeholders and the production of the evidence base. These objectives will seek to deliver the overall aim of the plan. They build upon, and are consistent with, relevant national and local policies/strategies.

Table 4: Minerals Plan Objectives

OBJECTIVE NUMBER	OBJECTIVE
1	To protect local communities and the natural and built environment 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 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 materials (excluding peat) where required to supplement the energy mix nationally and regionally.

3.6 Testing the Minerals Plan Objectives against the Sustainability Appraisal Framework

In order to ensure that the Objectives of the Minerals Plan are consistent with the principles of sustainable development they must be tested against the SA framework. This enables conflicts and tensions between the objectives to be identified and necessary additions or amendments to be made.

Table 5 below 'tests' the Mineral Plan's objectives against each of the SA objectives.

Overall the objectives of the Minerals Plan are considered to be compatible with the SA objectives. In particular, the objectives of protecting communities and the natural and built environment from mineral development and recognising the importance of high quality restoration once operations have ceased; and encouraging the sustainable transportation of minerals, are especially consistent with the principles of sustainable development.

There were no instances where the objectives of the Minerals Plan were considered to be incompatible with a SA objective. Nevertheless, there were some uncertain relationships between the two sets of objectives. In particular, the Minerals Plan objective of supporting the development of local energy minerals would have an uncertain impact on a number of the environmental objectives.

Summary SA Objective	Exploit growth potential of business sectors, increase use of secondary/ recycled products	Encourage sustainable economic growth and reduce disparities	Develop and market Greater Manchester's image	Develop and maintain a healthy labour market	Reduce need to travel, improve use of sustainable transport modes	Improve physical and mental health and reduce health inequalities	Improve access to affordable and resource efficient housing	Enable communities to contribute to decision-making, reduce social exclusion	Improve access to basic goods, services and amenities	Protect, enhance and manage built environment and archaeological assets	Protect, enhance and manage biodiversity and sites of geological importance	Protect and improve landscape and townscape character and accessibility	Protect and improve local environmental quality, reduce crime	Protect and improve quality of controlled waters	Protect and improve air quality	Restore and protect soil and land, manage contaminated land	Mitigate and adapt to climate change	Minimise risk of flooding, increase use of SUDS	Ensure the prudent use of natural resources	Minimise energy use, promote efficient use and renewable energy
SA Objective **Summary Minerals Plan Objective**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Protect local communities and the natural and built environment from the impacts of minerals development	0	0	+	0	?	+	0	0	0	+	+	+	+	+	+	+	?	+	?	?
Safeguard potentially economically viable mineral resources from sterilisation	+	?	0	0	+	0	?	0	0	0	0	0	0	0	+	0	+	0	+	+
Promote, where practicable, the sustainable transport of minerals	0	0	+	0	+	+	0	0	0	0	0	+	+	?	+	0	+	0	0	+
Provide an adequate and steady supply of minerals to meet Greater Manchester's needs.	+	+	+	+	+	0	+	0	0	?	?	?	?	0	?	?	+	0	+	+
Support the development of local energy minerals	+	+	0	+	?	0	0	0	0	?	?	?	?	0	?	?	?	?	+	?

+ Objectives are compatible

Objectives are not compatible

? Uncertain relationship

0 No direct relationship

3.7 Data Limitations/Technical Difficulties

The SEA Directive requires the identification of any difficulties encountered; these may include technical deficiencies or lack of knowledge. There were no significant technical difficulties encountered during the undertaking of the SA of the Minerals Plan Publication report.

However, there were some areas of uncertainty. For instance, it was noted that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. This resulted in some uncertainty over the impact of the policies concerned with natural building stone and quarries important for the maintaining historic buildings on the objectives relating to developing and marketing Greater Manchester's image; reducing the need to travel; protecting, enhancing, managing and restoring the rich diversity of cultural, built environment; protecting townscape character; mitigating climate change; and minimising the requirement for energy use.

The policy relating to restoration and aftercare was difficult to appraise against some of the SA objectives and their associated sub-objectives due to the fact that potential afteruses are unknown.

3.8 Screening for Habitats Regulations Assessment

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna – the 'Habitats Directive' – provides legal protection for habitats and species of European importance. Article 6 of this Directive introduced the requirement to undertake a 'Habitats Regulations Assessment' of the implications of proposed land use plans for the integrity of nature conservation sites of European importance. Such sites are known as Natura 2000 sites, and include Special Areas of Conservation (SACs), candidate Special Areas of Conservation (cSACs), Special Areas of Protection (SPAs), potential Special Areas of Protection (pSPAs), Ramsar sites and Offshore Marine Sites (OMSs). The Greater Manchester area is home to several Natura 2000 sites.

The purpose of a Habitats Regulations Assessment is to determine whether or not significant effects on European sites are likely and to suggest ways in which they could be avoided. Under the provisions of the Habitats Directive, consent can only be granted for such a plan if, as a result of the Habitats Regulations Assessment, it can be demonstrated that the integrity of the sites will not be adversely affected or, where adverse impacts are anticipated, there is shown to be no alternative solutions and imperative reasons of overriding public interest for the plan to go ahead.

A Habitats Regulations Assessment Screening (Stage 1) of the Greater Manchester Minerals Plan was undertaken by the Greater Manchester Ecology Unit. This screening established that there are five European Sites could potentially be impacted upon by the Plan. A Habitats Regulations Assessment Screening (Stage 1) of the Greater Manchester Minerals Plan Preferred Approach report was subsequently undertaken.

The Habitats Regulations Assessment Screening (Stage 1) of the Preferred Approach report considered that none of the Preferred Areas identified within the

Plan were likely to have an impact on any European Site. The Preferred Areas were therefore screened out of the Assessment. However, the HRA Screening concluded that the following policy directions could potentially have a damaging effect on one or more European Sites:

- Policy Direction 2: Areas of Search for Aggregates;
- Policy Direction 3: Unconventional Gas Resources;
- Policy Direction 4: Minerals Safeguarding Areas;
- Policy Direction 5: Unallocated Sites;
- Policy Direction 7: Reworking of Colliery Spoil Tips;
- Policy Direction 8: Protecting Minerals Plan Allocations and Existing Minerals Infrastructure; and
- Policy Direction 9: Restoration and Aftercare.

The HRA Screening (Stage 1) of the Preferred Approach report however stated that many of these policies were identified at this stage in the Plan because there was insufficient detail to screen them out and a precautionary approach was therefore taken. A number of wording changes were suggested for the policy directions to overcome some of this uncertainty.

A further iteration of the HRA Screening has been undertaken to reflect the amendments that have been made to the Minerals Plan between the Preferred Approach and Publication stages. This updated HRA Screening notes that all recommendations made in previous iterations of the HRA have been incorporated into the Plan. It therefore concludes that none of the policies within this Plan have been identified as potentially having a damaging effect any European Sites. Accordingly, a full Appropriate Assessment of the Plan is not required.

4. APPRAISAL OF THE MINERALS PLAN PUBLICATION DOCUMENT

This section provides a summary of the results of the SA of the Minerals Plan Publication report. This appraisal considered the policies contained within the plan against the twenty sustainability objectives identified in the SA Scoping Report and their associated sub-objectives and indicators. This appraisal considered the degree and type of impact, split by short term (0-5 years), medium term (5-10 years), and long-term (10+ years). It also predicted the certainty of impact (in terms of high, medium and low); the scale of impact (which ranged from local to national); the permanence of the impact; any key secondary, cumulative and/or synergistic impacts; and options for mitigation.

The full SA matrices are available in the accompanying Sustainability Appraisal Report Appendices, which can be downloaded from www.gmmineralsplan.co.uk.

4.1 Summary of the Significant Effects of Aim

The Aim has the potential to have a positive impact on a wide range of sustainability objectives. In particular, by facilitating the use of recycled aggregates and secondary mineral products and delivering a steady supply of minerals to meet Greater Manchester's needs, 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 and some positive impact on the objective of encouraging sustainable economic growth.

By minimising the need for new primary extraction, the Aim is 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. The strengthening of the reference to ensuring the environment and community are protected from the impacts of minerals development should also ensure that the Aim has a positive impact on the objectives relating to physical and mental health; protecting biodiversity, protected species, habitats and sites of geological importance; protecting landscape and townscape character; protecting local environmental quality; protecting the quality of controlled waters; and minimising the risk of flooding.

There are no anticipated negative or uncertain effects on the sustainability objectives.

4.2 Summary of the Significant Effects of the Minerals Plan Policies

The Minerals Plan sets out the policy approach to working each of the minerals within Greater Manchester and sets out the key planning and environmental criteria that will be considered when assessing proposals for minerals working or the provision of minerals infrastructure. The summary of the SA of these policies approaches is provided below.

Policy 1: Key Planning and Environmental Criteria
The policy relating to Key Planning and Environmental Criteria would have a positive impact on a range of sustainability objectives. In particular, the policy would ensure that proposals minerals workings and minerals infrastructure do not have an

unacceptable impact on a wide range of assets. As such, it is considered that the policy would have a positive impact on the objectives relating to physical and mental health; cultural, built heritage; biodiversity and geodiversity; townscapes and landscapes; local environmental quality; water quality; air quality; land and soil; flood risk; and developing Greater Manchester's image. It is however noted that the list of criteria does not make a specific reference to air quality and it is therefore recommended that air quality is added to the list of considerations included within the policy.

There are no negative on the sustainability objectives. The policy would however have an uncertain impact on a wide range of objectives. By protecting a wide range of natural and historic environment assets the policy would restrict the areas within Greater Manchester where minerals can be worked. Given that minerals can only be worked where they are found, the policy could therefore lead to some mineral reserves not being worked. As a result, it is considered that the policy would have an uncertain impact on the objectives relating to exploiting the growth potential of business sectors; encouraging sustainable economic growth; developing and maintaining a healthy labour market; reducing the need to travel; mitigating climate change; ensuring the prudent use of natural resources; and minimising the requirement for energy use. It is however recognised that the approach set out in the policy is necessary to ensure mineral workings and minerals infrastructure contribute positively to sustainable development. As such, no mitigation measures are recommended to address this.

Policy 2: Primary Extraction of Minerals – Aggregates
Policy 2 would have a positive impact on a number of objectives. By identifying the parts of the sub-region that have the least constraints and by providing a mechanism to support applications for minerals extraction where there is a demonstrable need for the mineral, the policy would support growth in the minerals sector and thereby have a positive effect on the objectives relating to exploiting the growth potential of business sectors and promoting sustainable economic growth.

The policy states that applications for the extraction and/or processing of sand, gravel or sandstone/gritstone will only be permitted where the proposal would be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. In addition, a wide range of natural and historic environment assets would be excluded from the Areas of Search and other sensitive areas where the Minerals Planning Authority would prefer mineral working not to take place are also identified, which should help support their protection. As a result, it is anticipated that the policy would have a major positive impact on the objectives relating to cultural and built environment assets; biodiversity and sites of geological importance and landscape and townscape character, and some positive impact on the objectives relating to Greater Manchester's image; physical and mental health; access to services and amenities; climate change; restoring and protecting land; and the quality of controlled waters. Furthermore, by providing a mechanism to enable the sub-region to meet any shortfall in minerals provision, the policy will reduce the amount of minerals that need to be imported from outside Greater Manchester. Consequently, it is envisaged that the policy would also have a positive impact on the objectives relating to reducing the need to travel; climate change and energy use.

There are no negative effects on the sustainability objectives.

Policy 3: Natural Building Stone

The policy has the potential to have a positive impact on a number of sustainability objectives, particularly those relating to economic issues. By providing a flexible approach that enables natural building stone to be extracted to meet the ad hoc nature of demand and variable nature of the resource, it is anticipated that the policy will support growth in the minerals sector and it is therefore considered that the policy should have a positive impact on the objectives relating to exploiting the growth potential of businesses; encouraging sustainable economic growth; and developing and maintaining a healthy labour market.

The policy provides a mechanism for natural building stone to be worked where there is viable mineral for extraction. It could therefore ensure that there is a supply of natural stone for the conservation and restoration of the historic built environment and reduce the need to import minerals into the sub-region. As a result, it is anticipated that the policy could have a positive impact on the objectives relating to developing Greater Manchester's image; reducing the need to travel; protecting, enhancing and restoring the rich diversity of cultural, built environment; mitigating climate change; and minimising the requirement for energy use. Nevertheless, the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, the extent to which the stone used for conservation projects in Greater Manchester is obtained from sites within the sub-region is presently unknown. There is therefore only limited certainty over the impact of the policy on these objectives.

By specifying that proposals for the working of natural building stone will only be permitted where they are in accordance with the Key Planning and Environmental Criteria as set out in Policy 1 of the Plan, the policy is likely to have some positive impact on the objective relating to protecting physical and mental health; protecting and enhancing biodiversity; protecting and improving landscape and townscape character; protecting local environmental quality; protecting and improving the quality of controlled waters; restoring and protecting land and soil; protecting air quality; and minimising the risk of flooding.

There are no negative or uncertain effects on the sustainability objectives.

Policy 4: Primary Extraction of Minerals – Non-Aggregates

The policy relating to the primary extraction of non-aggregate minerals has the potential to have a number of positive impacts. By requiring proposals to be in accordance with the Key Planning and Environmental Criteria contained within Policy 1, it is considered that the policy would provide additional protection to communities and the environment from the potential negative impacts associated with minerals development. As such, it is envisaged that the policy would have a positive impact on the objectives relating to physical and mental health; protecting the cultural, built environment; biodiversity and geodiversity; townscapes and landscapes; local environmental quality; water quality; air quality; land and soil; flood risk; and developing Greater Manchester's image.

In addition, by providing a mechanism for allowing additional sites to be worked where there is an adequate reserve of the mineral in terms of quality and quantity, the policy has the potential to impact positively on the objectives of exploiting the growth potential of business sectors; encouraging sustainable economic growth; and ensuring the prudent use of natural resources. It would also assist Greater

Manchester in meeting a greater proportion of its own minerals needs and thereby minimise the need to import minerals into the sub-region. This would have a positive impact on the objectives of reducing the need to travel; mitigating climate change; and minimising the requirement for energy use. Although it is acknowledged that the certainty of this impact on these objectives is low due to uncertainty over whether proposals for the primary extraction of non-aggregate minerals will come forward during the plan period.

There are no negative or uncertain effects on the sustainability objectives. As such, no mitigation measures are recommended.

Policy 5: Unconventional Gas Resources

The policy on unconventional gas resources would have a positive impact on a wide range of sustainability objectives. By leading to the recovery of unconventional gas that would have otherwise remained unused, the policy 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. By supporting the exploration and production of unconventional gas the policy could also support economic growth and the diversification of the minerals sector. As such, it is envisaged that the policy is likely to have a positive effect on the objectives relating to exploiting the growth potential of business sectors; encouraging sustainable economic growth; and developing and maintaining a healthy labour market.

The policy specifies that applications for unconventional gas exploration and production wells will only be permitted where they are in accordance with the Key Planning and Environmental Criteria in Policy 1. It also states that applications must be accompanied by detailed plans for the removal of all equipment and the restoration of the site to a standard approved by the Mineral Planning Authority. Consequently, it is concluded that the policy has the potential to have some positive impact on the objectives relating to Greater Manchester's image; health; the historic environment; biodiversity; landscape and townscape character; local environmental quality; air quality; flood risk; and the quality of controlled waters.

The burning of fossil fuels, such as coal bed methane and coal mine methane, is a major contributor to climate change. Supporting the extraction and use of unconventional gas resources therefore has the potential to have a negative impact on the objectives relating to mitigating climate change and energy use. It is however recognised that the importation of energy minerals from outside the UK would have a markedly greater impact on the objective of mitigating climate change. Furthermore, it is noted that national policy stipulates that the Minerals Plan should not predetermine the appropriate level of unconventional gas to be produced. No mitigation measures to address this potential impact are therefore proposed.

Policy 6: Peat

Policy 6 would deliver a number of significant sustainability benefits. In particular, by restricting peat extraction to sites which have been previously worked for peat and by limiting the removal of peat to only what is necessary to facilitate the restoration of the site, the policy will lead to the protection of high quality natural environments and increase the likelihood of peat bogs continuing to function as a 'carbon sink'. As a result, it is anticipated that the policy would have a major positive impact on the objectives relating to mitigating climate change; ensuring the prudent use of natural resources; minimising the risk of flooding; and restoring and protecting land and soil;

and some positive impact on the objectives relating to developing Greater Manchester's image; protecting local environmental quality; protecting landscapes; and protecting archaeological assets.

Whilst it is recognised that all peat is likely to be of value to biodiversity, specifying that any peat extraction must be the minimum required to restore a previously worked site to lowland raised bog should ensure that the policy has a major positive impact on the objective relating to biodiversity, protected species and habitats, particularly as lowland raised bog is a UK BAP priority habitat and is included in the list of protected habitats in Annex 1 of the European Habitats Directive. Relying on existing planning permissions for peat, which are sufficient to meet demand, will ensure that peat resources are used wisely. In addition, as existing planning permissions for peat extraction run until 2042 and are considered to be sufficient to meet the horticultural industries needs up to that time, it is envisaged that limiting peat extraction to instances where it is necessary to facilitate the restoration of a site that has previously been worked for peat is unlikely to have a significant impact on the objectives relating to exploiting the growth potential of business sectors; encouraging sustainable economic growth and developing and maintaining a healthy labour market.

There are no anticipated negative or uncertain effects on the sustainability objectives.

4.3 Summary of the Significant Effects of the Mineral Safeguarding Areas Policy

Minerals can only be worked where they are found and the sterilisation of mineral resources can occur when other development, such as housing or industry, is built on top of a mineral resource. The Minerals Plan therefore sets out how Greater Manchester's mineral resources will be protected from other forms of development and the extent of the resource that will be protected. The summary of the SA of the policy on Mineral Safeguarding Areas is provided below.

Policy 7: Mineral Safeguarding Areas
By preventing Greater Manchester's mineral resources from being sterilised unnecessarily, the Mineral Safeguarding Areas (MSAs) policy 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. The policy would also reduce the likelihood of the sub-region becoming more dependent on minerals from outside Greater Manchester. It is therefore anticipated that the policy would have a positive impact on the objectives relating to reducing the need to travel; mitigating climate change; and decreasing the need to consume energy.

The policy would not require minerals to be extracted prior to a non-minerals development taking place in a MSA if prior extraction would have an unacceptable environmental impact. In addition, it requires proposals for the prior extraction of minerals to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. Consequently, it is anticipated that the policy would have a positive impact on the objectives relating to Greater Manchester's image; built heritage; biodiversity, protected species and habitats; landscape and townscape character; local environmental; the quality of controlled waters; air quality; managing contaminated and potentially unstable land; and minimising flood risk. In addition, the

exclusion of the urban areas from the MSA reduces the likelihood of communities being affected by the potential nuisances associated with minerals development, such as dust and noise. It is therefore envisaged that the policy would also have some positive impact on the objective relating to improving physical and mental health.

By ensuring that minerals are not unnecessarily sterilised, the policy on Mineral Safeguarding Areas would also help ensure that economic growth is not constrained by an inadequate provision of mineral reserves. This would have a positive impact on the economic objectives relating to the sustainable economic growth and developing a healthy labour market. It is however acknowledged that the requirement to explore the opportunities for prior extraction of minerals could result in delays to some developments, which reduces the level of certainty over the impact on these objectives.

The policy will prevent minerals from being sterilised unnecessarily and provides a mechanism to meet any shortfall in minerals provision during the plan period. It is therefore envisaged that the policy would have a positive impact on the objective of exploiting the growth potential of business sectors. The exclusion of the urban area from the MSA may mean that some opportunities for prior extraction on regeneration projects and brownfield sites are missed. Nevertheless, it is recognised that there have been limited examples of extraction taking place in the urban area in Greater Manchester and the supporting text to the policy states that the exclusion of the urban area does not mean that prior extraction of minerals is wholly unsuitable in this location.

There are no negative or uncertain effects on the sustainability objectives.

4.4 Summary of the Significant Effects of Development Management Policies

The Minerals Plan incorporates a series of development policies which set out the requirements to be met before planning permission for minerals development is granted. The policies contained within the Minerals Plan will address minerals specific issues, as the Minerals Plan forms part of the wider development framework and each Authority will prepare policies in the individual Local Development Frameworks common to all types of development. A summary of the SA of each of these policies is provided below.

Policy 8: Sustainable Transport of Minerals
The policy relating to the transport of minerals would have a positive impact on a number of the sustainability objectives. In particular, by encouraging the transportation of minerals by more sustainable modes in preference to road transport, the policy would have a positive impact on the objectives relating to the use of sustainable transport modes; mitigating climate change; and promoting the efficient use of energy. Nevertheless, the level of certainty of this impact is low due to the fact that there are likely to be a number of instances where the transportation of minerals by rail or canal is not feasible or economically viable.

The policy would prevent minerals development involving the transport of minerals by road if the traffic generated would have an unacceptable impact on local residents,

through for example noise, dust or vibrations, or road safety. Therefore, it is concluded that the policy is likely to have a positive impact on the objective relating to physical and mental health. The policy would also prevent minerals development involving the transport of minerals by road if the traffic generated would have an unacceptable impact on the environment. As a result, it is concluded that the policy is likely to have a positive impact on the objectives relating to developing Greater Manchester's image, protecting local environmental quality, protecting air quality and protecting townscape character.

The policy would not require minerals to be transported by sustainable means where it would be so costly as to render the minerals development unviable. As a result, it is envisaged that the policy would not have a negative impact on the economic objectives of exploiting the growth potential of business sectors, encouraging sustainable economic growth or developing a healthy labour market. It is therefore considered that the policy would have no negative or uncertain effects on the sustainability objectives.

Policy 9: Reworking of Colliery Spoil Tips
Policy 9 would have a positive impact on a number of the economic objectives. It would lead to recovery of coal that would have otherwise remained unused. It would thereby 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. It would also provide additional opportunities in the minerals sector and result in the creation of a number of employment opportunities. As such, the policy is likely to have a positive impact on the objectives relating to exploiting the growth potential of business sectors; promoting sustainable economic growth; and developing and maintaining a healthy labour market. Nevertheless, it is considered that the certainty that the policy would have a positive impact on each of these objectives is reduced by the fact that the policy now specifies that reworking will only be permitted where it is necessary to restore the tip to remedy environmental defects, which may reduce the number of instances in which colliery spoilt tips are reworked.

The policy would support the restoration of land that has been badly degraded through its use as a colliery spoil tip and would potentially reduce the need for new extraction sites. It is therefore anticipated that the policy would have a major positive affect on the objective relating to restoring and protecting land and soil and managing contaminated and unstable land. The policy specifies that the reworking of colliery spoil tips will only be permitted if it is compliant with the Key Planning and Environmental Criteria listed in Policy 1. In addition, the policy stipulates that the reworking of spoil tips will only be permitted where it is necessary to restore the tip to remedy environmental defects. As a result, it is envisaged that the policy would have a major positive impact on the objective relating to protecting and improving landscape character and a positive impact on the objective relating to protecting, enhancing and restoring biodiversity, protected species and habitats; local environmental quality; and the quality of controlled waters. It is however noted that the policy no longer makes reference to the reworking of colliery tips resulting in a visual improvement to the area. This reduces the level of certainty that the policy would have on the objectives relating to the image of Greater Manchester; landscape character; and local environmental quality.

The policy has the potential to give rise to a number of negative impacts. There are no coal-fired power stations in Greater Manchester and, as a result, coal obtained

from reworked colliery spoil tips would need to be transported to coal-fired power stations outside of the sub-region. As a result, the policy could potentially have a negative effect on the objectives relating to air quality; reducing the need to travel; mitigating climate change; and minimising the requirement for energy use. The promotion of the use of sustainable modes of transporting coal out of Greater Manchester by the Plan will however address some of these concerns. It is also recognised that the only alternative to incremental coal output in the UK is to import of coal over long distances which would have a more significant negative impact on greenhouse gas emissions and energy use.

Recovering coal from colliery spoil tips also increases the likelihood of the UK being 'locked into' dependence on fossil fuels, which would have an adverse impact on the objectives relating to climate change and energy use. Nevertheless, as national guidance stipulates that the planning system should not predetermine the appropriate levels of coal to be produced, no mitigation measures are proposed to address this.

Policy 10: Protecting Existing Mineral Sites / Infrastructure
The policy on protecting existing minerals sites and infrastructure has the potential to have a positive impact on a number of sustainability objectives. In particular, by preventing the sterilisation of mineral deposits and sites essential for the sustainable transportation of minerals, the policy has the potential to have a major positive impact on the objectives relating to ensuring the prudent use of natural resources and improving use of sustainable transport modes. The policy would also have some positive impact on the objectives relating to protecting air quality; mitigating climate change; and promoting the efficient use of energy.

By preventing development that would have an unacceptable impact on existing mineral workings and providing protection for minerals recycling / secondary aggregates processing sites, the policy should help ensure there is an adequate supply of materials to provide the infrastructure required to support Greater Manchester's economy. It is therefore envisaged that the policy would also have a positive impact on the economic objectives of exploiting the growth potential of business sectors; encouraging sustainable economic growth; and maintaining a healthy labour market.

There are no negative or uncertain effects on the sustainability objectives.

Policy 11: Protecting Quarries Important for Maintaining Historic Buildings
It is envisaged that Policy 11 would have a positive impact on a number of sustainability objectives. In particular, by protecting quarries that supply minerals that are important for maintaining historic buildings, the policy would contribute to the protection of the significance of historic assets by ensuring there is a sufficient supply of minerals for their maintenance/repair. The policy would therefore have a major positive impact on the objective of protecting, enhancing, managing and restoring the built environment and archaeological assets and some positive impact on the objectives relating to protecting and improving townscape character; improving local environmental quality; and developing the image of Greater Manchester.

The policy would ensure that developments that have an unacceptable impact on a quarry that is important for maintaining historic buildings are only permitted where the mineral working is no longer required or the need for the proposed development outweighs the need to continue the mineral working. The policy would therefore have

a major positive impact on the objective of ensuring the prudent use of natural resources and its sub-objective of supporting the repair and re-use of existing buildings and some positive impact on the economic objectives of exploiting the growth potential of business sectors and encouraging sustainable economic growth.

By providing protection to quarries in Greater Manchester that are important for maintaining historic buildings, the policy could help reduce the need to import minerals into the sub-region. This would have a positive impact on the objectives relating to reducing the need to travel; protecting air quality; mitigating climate change; and promoting the efficient use of energy. There is however only limited certainty that the policy would have a positive impact on these objectives due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed and, as a result, it is presently uncertain whether such sites are found within the sub-region.

There are no negative or uncertain effects on the sustainability objectives.

Policy 12: Restoration and Aftercare
Policy 12 should ensure the restoration of minerals sites to prevent dereliction and blight and requires the final land use to contribute towards the enhancement of the landscape. This would have a significant positive impact on the objectives of developing and marketing Greater Manchester's image; protecting and improving landscape and townscape character; and restoring and protecting land and soil. The restoration of extraction sites should ensure the creation of a safe landform, where potential adverse emissions or run-off are satisfactorily dealt with. As a result, it is anticipated that the policy would also have a minor positive impact on the objectives relating to physical and mental health and protecting and improving the quality of controlled waters.

The policy provides for community liaison measures to be put in place during the operation of the site, including mineral extraction, restoration and final land use. The policy would therefore encourage wider community involvement and enable communities to contribute to, and influence, decision-making and implementation. As such, it would have a positive impact on the objective of enabling groups and communities to contribute to decision-making, and reducing social exclusion.

The policy should ensure the restoration of minerals sites to ensure that potential derelict sites are brought into beneficial use and it is stipulated that the final land use should provide for the enhancement of the quality of the local environment. The policy would therefore have a positive impact on the objective to protect and improve local environmental quality. The incorporation of a specific reference to the final land use providing for the enhancement of the setting of historic assets should also ensure that the policy has some positive impact on the objective of protecting and enhancing the rich cultural, built environment. Similarly, the inclusion of a requirement for the final land use to provide for the enhancement of biodiversity assets, European sites and the ecological value of the site should ensure that the policy now has some positive impact on the objective relating to the protection, enhancement and management of biodiversity, protected species and habitats and the objective of protecting and enhancing the rich cultural, built environment.

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 a wide range of sustainability objectives. As such, it is concluded that the policy would have an uncertain impact on the objectives relating to the growth potential of business sectors; sustainable economic growth; a healthy labour market; access to housing; access to basic goods, services and amenities; air quality; climate change; and the requirement for energy use.

4.5 Secondary, Cumulative and Synergistic Effects

Under the provisions of the SEA Directive, when appraising the sustainability of the Minerals Plan it is necessary to consider whether or not there are any secondary, cumulative and/or synergistic effects. A number of these effects were identified during the appraisal of the Minerals Plan. Examples of these are listed below.

The Aim
The secondary, cumulative and synergistic effects of the Aim were generally positive, for example:

- Supporting economic growth through ensuring a steady and sustainable supply of minerals to meet Greater Manchester's needs would have a positive secondary impact on employment opportunities;
- By protecting environmental assets, the aim would have a secondary benefit of improving the image of the sub-region;
- By supporting the re-use of recycled and secondary aggregates the proposed aim would have a positive secondary impact on reducing the amount of waste being sent to landfill, which cumulatively would reduce the need to identify additional landfill sites; and
- By facilitating the use of recycled aggregates and secondary mineral products the aim will reduce the sub-region's reliance on importing new minerals, which would help minimise the transportation of minerals and have secondary impacts on congestion, carbon emissions and air quality.

Minerals Plan Policies
Each of the Minerals Plan Policies would have a range of secondary, cumulative and synergistic effects, for instance:

- The Key Planning and Environmental Criteria policy would protect a range of environmental assets and would thereby have a significant secondary impact on perceptions of the sub-region;
- By providing a mechanism to ensure that there is a supply of natural stone for the conservation and restoration of the historic built environment, the natural building stone policy would have the secondary effect of helping to maintain a distinctive sense of place for areas within the sub-region; and
- The policy relating to unconventional gas resources would lead to the recovery of an energy mineral that may have otherwise remained unused which would have secondary benefits of diversifying the energy mix of the country and increasing energy security; and
- The policy relating to peat should ensure that any peat bogs are protected from extraction, which would have a positive secondary impact on the image of the sub-region and adaptation to climate change.

Mineral Safeguarding Areas
The secondary, cumulative and synergistic effects of the preferred approach to safeguarding mineral resources are generally positive, for example:

- By ensuring that minerals are not sterilised unnecessarily the policy would reduce the need to import minerals from outside the conurbation, which would have a positive secondary impact on congestion and greenhouse gas emissions; and
- The policy's positive impact on economic growth and job creation has the potential to have a secondary impact on rates of deprivation.

Development Management Policies
The Development Management policies have a number of both positive and negative secondary, cumulative and synergistic effects. These include:

- The policy relating to the protection of quarries important for maintaining historic buildings would have the secondary effect of helping to maintain a distinctive sense of place for the sub-region; and
- The policy relating to aftercare and restoration would have secondary impacts on investment in the sub-region, biodiversity and perceptions of Greater Manchester.

4.6 Difference the Sustainability Appraisal Process has Made

The SA process concluded that the Minerals Plan has the potential to deliver a wide range of social, environmental and economic benefits. However, it also identified several instances where the Plan has the potential to have a negative impact on sustainability objectives, a number of uncertain impacts and a range of opportunities for further enhancements to the Plan's sustainability.

The Publication version of the Minerals Plan was appraised in two stages. The first appraisal of the document made a number of recommendations about how the performance of individual policies against the sustainability objectives could be improved. Following this initial appraisal, the wording of the several policies was amended to reflect the findings of the SA.

For example, the wording of the Aim was strengthened in relation to the impacts of minerals development on local communities and the environment so that the Aim now states that it will ensure that the environment and community are protected from the impacts of minerals development.

Following the initial appraisal of the Publication version of the Minerals Plan the policy relating to Unconventional Gas Resources was amended so that instead of requiring sites to be restored to their original land use it instead now requires them to be restored in accordance with a scheme, and to a standard, approved by the Minerals Planning Authority. This amendment was made to reflect the fact that there may be instances where it is not desirable to restore the site to its original land use.

The SA process also recommended the inclusion of most versatile agricultural land and air emissions within the list of environmental criteria to be considered when assessing proposals for minerals development. In addition, the wording of the policy on Restoration and Aftercare was revised as a result of the SA process to incorporate a requirement for the final land use to provide for the enhancement of biodiversity assets, European sites and the ecological value of the site.

The Minerals Plan Publication report was then reappraised following these amendments. Some further recommendations were made about how individual policies could perform better against the sustainability objectives. These include:

- The inclusion of air quality in the list of criteria listed in Policy 1; and
- The need to reintroduce the requirement for the reworking of colliery spoil tips to result in improvements to the visual amenity of the area.

In many other instances, the recommendations made by the SA were met by other policies in the Minerals Plan and therefore no mitigation is required. In other instances it was considered that mitigation measures were not appropriate.

For example, the SA recognised that the policy relating to reworking of colliery spoil had the potential to have a negative impact on the objective relating to climate change. However, it is recognised that national planning guidance stipulates that the planning system should not predetermine the appropriate levels of coal to be produced. In addition, it is acknowledged that the only alternative to incremental coal output in the UK is the importation of coal over long distances which would have a more significant negative impact on greenhouse gas emissions. Therefore, no mitigation is proposed to overcome this although it is recommended that the promotion of the use of sustainable modes of transporting coal out of Greater Manchester by the Plan will help address the secondary impacts.

5. MONITORING

5.1 The Annual Monitoring Report

The sustainability effects of implementing the Minerals Plan will be monitored on an annual basis and reported through each district's Annual Monitoring Report (AMR), which is published in December each year. The production of an AMR is a statutory requirement under section 35 of the Planning and Compulsory Purchase Act 2004. It will provide a basis for the:

- Identification of unforeseen adverse effects and any necessary remedial action;
- Assessment of whether the Strategy is achieving the SA objectives; and
- Assessment of the performance of mitigation measures.

The production of the AMR will remain the responsibility of each authority. However, a report will be produced by the GMGU and this will be incorporated into each district's AMR.

5.2 Monitoring Indicators

The indicators used to monitor the sustainability effects of implementing the Minerals Plan were set out in the SA Scoping Report of November 2009. The indicators are set out below by sustainability objective and sub-objective:

Economic

Objective 1	**To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products**	
	Sub Objectives	Indicator
	To diversify the economy in terms of the minerals sector. To promote growth in the minerals sector. To enable new and innovative mineral extraction technologies to be developed and utilised. To encourage the development of markets for recycled/secondary products. To minimise the production of waste. To increase mineral re-use and recycling.	Minerals industry turnover. Sales of primary aggregate. Secondary and recycled product production and use, and reduction in use of primary aggregates. Amount of Construction and Demolition waste diverted from landfill. Permitted reserves of primary aggregates.

Objective 2	**To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance**	
	Sub Objectives	Indicator
	To encourage sustainable economic growth through provision of adequate mineral reserves. To promote re-use and recycling of existing materials.	Mineral landbank and production figures Site Waste Management Plans submitted in planning applications for new development. Construction Demolition and Excavation Waste arisings and recycling rate. Use of Aggregates Levy Sustainability Fund.

Objective 3	**To develop and market Greater Manchester's image.**	
	Sub Objectives	Indicator
	To support the preservation and/or enhancement of high quality built, natural and historic environments. To promote the area as a destination for short and long term visitors, for residents and investors.	Area of land to be restored to 'soft' end uses as detailed in mineral planning applications, i.e. cultural, sporting and leisure facilities.

Objective 4	**To develop and maintain a healthy labour market**	
	Sub Objectives	Indicator
	To address the skills gap and enable skills progression. To provide a broad range of jobs and employment opportunities.	Employment in the minerals sector (number and percentage of total workforce).

Social

Objective 5	**To reduce the need to travel, improve choice and use of sustainable transport modes.**	
	Sub Objectives	Indicator
	Increase sustainable transport use (water and rail). To encourage walking, cycling and the use of public transport. Minimise transportation of minerals where possible.	Percentage of aggregates and waste imported/exported by rail/water. Number of planning permissions securing routing schemes.

Objective 6	**To improve physical health and mental health and reduce health inequalities**	
	Sub Objectives	Indicator
	To reduce deaths in key vulnerable groups. To promote healthier lifestyles. To reduce health inequalities among different groups in the community. To reduce the impact of nuisances associated with minerals development (e.g. dust, highway safety, noise, etc.)	Number of complaints to Local Authorities relating to minerals development nuisances. Mortality rate. Population in 'good' health (in particular respiratory diseases). Indices of deprivation.

Objective 7	**To improve access to good quality affordable and resource efficient housing**	
	Sub Objectives	Indicator
	To support the development and operation of resource efficient housing.	Site Waste Management Plans submitted in planning applications for new developments.

Objective 8	**To enable groups and communities to contribute to decision-making, and to reduce social exclusion**	
	Sub Objectives	Indicator
	To identify and engage with hard to reach stakeholders. To encourage wider community involvement in the design or the provision of services. To enable the community to contribute to and have influence in decision-making and be involved in its implementation.	Number of forums/workshops associated with Minerals Plan. Number of respondents at each stage of Minerals Plan consultation.

Objective 9	**To improve access to and use of basic goods, services and amenities for all groups**	
	Sub Objectives	Indicator
	To improve access to cultural, sporting and leisure facilities including natural green spaces. To improve access to essential services and facilities, including waste recycling facilities. To improve the range and quality of cultural, sporting and leisure facilities. To improve access to basic goods, promoting the use of those that are locally sourced.	Area of land to be restored to 'soft' end uses as detailed in mineral planning applications, i.e. cultural, sporting and leisure facilities. Length of new Public Rights of Way created on former mineral sites.

Environment

Objective 10	**To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings**	
	Sub Objectives	Indicator
	To protect and enhance the character and appearance of archaeological sites, historic buildings, conservation areas, townscape, landscape, parks and gardens and their settings.	Number of minerals applications affecting such designations.

Objective 11	**To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance**	
	Sub Objectives	Indicator
	To protect and enhance the biodiversity of the region's landscapes. To protect and enhance existing designated wildlife and geological sites and species populations. To protect and enhance habitats and species, providing opportunities for new habitat creation and reversing the fragmentation of wildlife corridors. To increase the economic benefit derived from the region's natural environment.	Amount and condition of local, regional, national and international designated sites in the Plan area. Area of new habitat created as detailed in minerals planning applications/restoration schemes. Change in woodland cover. Creation and maintenance of wildlife corridors.

Objective 12	**To protect and improve landscape and townscape character and accessibility**	
	Sub Objectives	Indicator
	To protect and enhance the accessibility of the landscape across the region. To protect and enhance the character and appearance of the region's countryside, maintaining and strengthening local distinctiveness and sense of place. To protect and enhance the character and appearance of archaeological sites, historic buildings, conservation areas, townscape, landscape, parks and gardens and their settings.	Number of planning applications approved despite being contrary to townscape and landscape considerations Number of minerals planning applications affecting such designations. Length of Public Right of Way lost or damaged by minerals developments.

Objective 13	**To protect and improve local environmental quality and reduce crime**	
	Sub Objectives	Indicator
	To reduce light and noise pollution and crimes such as fly tipping.	Number of planning applications with accompanying light, noise and dust mitigation information.

Objective 14	**To protect and improve the quality of controlled waters**	
	Sub Objectives	Indicator
	To maintain and enhance ground and surface water quality.	Use of new monitoring strategy being developed by the Environment Agency using the Water Framework Directive and River Basin Management Planning. Levels of nutrients in water.

Objective 15	**To protect and improve air quality**	
	Sub Objectives	Indicator
	To maintain and improve local air quality. To address the causal factors of poor air quality in Air Quality Management Areas.	Number of mineral planning conditions relating to Air Quality Management. Number of days when air pollution is moderate or higher.

Objective 16	**To restore and protect land and soil and to manage contaminated and potentially unstable land**	
	Sub Objectives	Indicator
	To reduce the amount of derelict, contaminated, degraded and vacant/underused land. To encourage the development of brownfield land for minerals sites in preference to greenfield and where such sites have significant biodiversity, agricultural or geological interest, to retain or incorporate this interest into any development. To reduce the loss of good soils to development.	Number of planning permissions securing reuse of worked sites for beneficial after-use. The proportion of land developed for minerals sites which is derelict/previously developed. Schemes granted permission which involve the retention of top soils. Loss of Agricultural Grades 1, 2, and 3a land (area).

	To maintain and enhance soil quality. To restore mineral sites to appropriate after uses.	Number of planning permissions securing creation of agricultural land. Number of restored sites resulting in the creation of agricultural land.

Objective 17	**To mitigate and adapt to climate change**	
	Sub Objectives	Indicator
	To contribute to the ability to adapt to the impacts of climate change. To reduce or minimise greenhouse gas emissions.	Carbon dioxide emissions by sector.

Objective 18	**To minimise the risk of flooding and increase the use of SUDS**	
	Sub Objective	Indicator
	To maintain water abstraction, run-off and recharge within carrying capacity. To reduce or manage flooding.	Number of minerals schemes permitted against EA flooding advice. Number of applications incorporating SUDS.

Objective 19	**To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources**	
	Sub Objective	Indicator
	To minimise the demand for raw material. To support the repair and re-use of existing buildings. To promote the use of locally arising recycled and secondary materials. To safeguard and use mineral resources wisely.	Number of applications for secondary/recycled aggregate processing. Number of applications granted permission for development without prior extraction contrary to exceptions in policy.

Objective 20	**To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources**	
	Sub Objective	Indicator
	To minimise the need for energy. To maximise the production and/or use of renewable energy. To increase energy efficiency (e.g. resource efficiency in buildings, considering energy efficiency targets for new developments, transport modes, etc.) To minimise the use of fossil fuels. To reduce or minimise greenhouse gas emissions.	Proportion of energy used on restored sites which is generated from renewable sources. Site Waste Management Plans submitted in planning applications for new developments.

5.3 Next Steps

This SA Report is being published alongside the Publication version of the Minerals Plan to provide the public, statutory consultees and other stakeholders with an opportunity to express opinions on this SA Report and to use it as a reference point whilst commenting on the Minerals Plan Publication document. This period of public consultation will run from the 22nd July 2011 to 2nd September 2011.

Comments should be sent:

- By completing a registration process and submitting your comments through the online system at http://consult.gmwastedpd.co.uk/portal/wmpt/;
- By email, to: planningteam@gmmineralsplan.co.uk; or
- By post, to:
  Minerals Plan Team
  C/O GMGU
  Emerson House
  Albert Street
  Eccles
  M30 0TE.

All comments received will be analysed. Any significant changes to the Minerals Plan arising from comments received will need to be assessed as part of the SA process. The Council will then submit the Core Strategy to the Planning Inspectorate for an Independent Examination in early 2012. This SA report will form part of the evidence base that the Planning Inspector will refer to in order to assess the soundness of the Core Strategy.

Following the examination, the Inspector will issue a report to AGMA containing binding amendments that must be made to the Core Strategy before it is adopted. A

summary of the main issues raised on the SA, and how these were taken into account in the development of the plan and SA Report, will be produced as part of the adoption statement for the Core Strategy.

6. CONCLUSIONS

Urban Vision Partnership Ltd were commissioned by GMGU to undertake a sustainability appraisal of the Greater Manchester Minerals Plan Publication Report. The appraisal work has been informed by national guidance, best practice and the methodology proposed by GMGU in their Scoping Report.

The SA process has played a key role in improving the social, environmental, and economic performance of the Minerals Plan. The Plan has been appraised at the Issues and Options, Preferred Approach and Publication stages and a clear trend can be identified through these stages as the emerging Plan improves its performance against the sustainability objectives and their associated sub-objectives.

This appraisal considered the policies contained within the plan against the twenty sustainability objectives identified in the SA Scoping Report and their associated sub-objectives and indicators. This appraisal considered the degree and type of impact, split by short term (0-5 years), medium term (5-10 years), and long-term (10+ years). It also predicted the certainty of impact (in terms of high, medium and low); the scale of impact (which ranged from local to national); the permanence of the impact; any key secondary, cumulative and/or synergistic impacts; and options for mitigation.

The Minerals Plan has scored very highly in the SA process and it is envisaged that the Plan has the potential to deliver a wide range of social, environmental and economic benefits. However, the SA process has also identified several instances where aspects of the Plan have the potential to have a negative impact on sustainability objectives, a number of uncertain impacts and a range of opportunities for further enhancements to the Plan's sustainability.

Aim

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.

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 also 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

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 restrict the areas within Greater Manchester where minerals can be worked and, given that minerals can only be worked where they are found, the policy could therefore lead to some mineral reserves not being worked. As a result, the policy would have an uncertain impact on a number of economic and

environmental 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.

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.

The inclusion of a cross-reference to the Key Planning and Environment Criteria contained within Policy 1 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 2, 3 and 4 would have a positive impact on a number of the economic objectives and the policy relating to peat 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.

Mineral Safeguarding Areas
The policy relating to Mineral Safeguarding Areas 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
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.

The policy relating to the reworking of colliery spoil tips 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 would however 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.

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.

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.

GREATER MANCHESTER MINERALS DPD: SUBMISSION

SUSTAINABILITY APPRAISAL APPENDICES

November 2011

A1. AIM OF THE MINERALS PLAN

Aim of the Minerals Plan									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	+ +	+ +	+ +	High	GM wide	Long term	Increased job opportunities in the minerals sector.	The overall aim will encourage the development of markets for secondary / recycled products but will also lead to mineral use being managed so as to facilitate economic growth.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	+	+	+	Low	GM wide	Long term	Increased job opportunities in the minerals sector.	The aim would promote the re-use and recycling of existing materials but would also support economic growth through the provision of adequate mineral reserves. Nevertheless, as minerals can only be worked where they are found, it is uncertain whether any employment opportunities created would be accessible from the more deprived parts of the sub-region.	
3. To develop and market Greater Manchester's image.	+	+	+	Medium	GM wide	Long term		The aim would support the sub-objective of preserving high quality built, natural and historic environments by ensuring that the environment is protected from the impacts of minerals development and by minimising the need for new primary extraction through facilitating the better use of recycled / secondary aggregates.	
4. To develop and maintain a healthy labour market.	+	+	+	Medium	GM wide	Long term	Reduced deprivation	Providing a steady and sustainable supply of minerals to support Greater Manchester's economic development needs would lead to the creation of a number of employment opportunities.	

Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	+	+	+	Low	GM wide	Long term	Reduced congestion and carbon emissions. Improved air quality	Facilitating the use of recycled aggregates and secondary mineral products will reduce the sub-region's reliance on importing new minerals, which would help minimise the transportation of minerals. It is however recognised that mineral resources are not always found where they are accessible by non-road modes of transport. The aim may not therefore increase the use of sustainable transport modes. This reduces the level of certainty of the impact on this objective.	
6. To improve physical health and mental health and reduce health inequalities.	+	+	+	Medium	GM wide	Long term		Both primary extraction and the recycling of aggregates have the potential to impact on health through, for example, dust and noise. However, the aim will ensure that communities are protected from the impacts of minerals development.	The aim has been appraised in two stages. Following the first appraisal, the wording of the aim has been strengthened in relation to protecting local communities from the impacts of minerals developments.
7. To improve access to good quality affordable and resource efficient housing.	+	+	+	Medium	GM wide	Long term	Positive impact on quality of life.	The aim will ensure there is a steady and sustainable supply of minerals to support the ambitious growth strategy for Greater Manchester.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+	+	+	Medium	GM wide	Long term	Improved image of the sub-region	The primary extraction of minerals has the potential to impact on the significance of heritage assets. However, the aim seeks to reduce the need for primary extraction by facilitating the greater use of recycled aggregates and secondary mineral products. It now also states that it will ensure the environment will be protected from the impacts of minerals development.	The aim has been appraised in two stages. Following the first appraisal, the wording of the aim has been strengthened in relation to protecting the environment from the impacts of minerals developments.
11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	+	+	+	Medium	GM wide	Long term	Improved image of the sub-region	The primary extraction of minerals has the potential to impact on biodiversity, protected species and sites of geological importance. Nevertheless, the aim seeks to reduce the need for primary extraction by facilitating the greater use of recycled aggregates and secondary mineral products. It now also states that it will ensure the environment will be protected from the impacts of minerals development.	The aim has been appraised in two stages. Following the first appraisal, the wording of the aim has been strengthened in relation to protecting the environment from the impacts of minerals developments.
12. To protect and improve landscape and townscape character and accessibility.	+	+	+	Medium	GM wide	Long term	Improved image of the sub-region	The primary extraction of minerals has the potential to impact on landscape and townscape character and accessibility. Nevertheless, the aim seeks to reduce the need for primary extraction by facilitating the greater use of recycled aggregates and secondary mineral products. It now also states that it will ensure the environment will be protected from the impacts of minerals development.	The aim has been appraised in two stages. Following the first appraisal, the wording of the aim has been strengthened in relation to protecting the environment from the impacts of minerals developments.

13. To protect and improve local environmental quality and reduce crime.	+	+	+	Medium	Local	Long term	Improved quality of life	The aim states that the spatial planning framework will ensure that the environment will be protected from the impacts of minerals development. This should ensure that local environmental quality is protected.	The aim has been appraised in two stages. Following the first appraisal, the wording of the aim has been strengthened in relation to protecting the environment from the impacts of minerals developments.
14. To protect and improve the quality of controlled waters.	+	+	+	Medium	GM wide	Long term	Secondary impacts on biodiversity.	The aim states that the spatial planning framework will ensure that the environment is protected from the impacts of minerals development. This should ensure that the quality of controlled waters is protected.	The aim has been appraised in two stages. Following the first appraisal, the wording of the aim has been strengthened in relation to protecting the environment from the impacts of minerals developments.
15. To protect and improve air quality.	+	+	+	Medium	GM wide	Long term	Secondary impacts on health, particularly among those who suffer from respiratory illnesses	Both primary extraction and the recycling of aggregates have the potential to impact on air quality through, for example dust emissions. Nevertheless, environmental regulations and planning conditions have the capability to mitigate any adverse impact. In addition, the aim will ensure that the environment is protected from the impacts of minerals development. Furthermore, facilitating the use of recycled aggregates and secondary mineral products will reduce the sub-region's reliance on importing new minerals, which would help minimise the transportation of minerals and thereby reduce the level of emissions associated with the transportation of minerals.	The aim has been appraised in two stages. Following the first appraisal, the wording of the aim has been strengthened in relation to protecting the environment from the impacts of minerals developments.

16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	+	+	+	Medium	GM wide	Long term	Improved image of the sub-region	Facilitating the better use of recycled aggregates and secondary mineral products will minimise the need for new primary extraction which would help protect land and soil resources from minerals development.	
17. To mitigate and adapt to climate change.	+	+	+	Low	GM wide	Long term	Reduced secondary impacts associated with climate change, such as increased flood risk.	Minerals extraction and processing activities would both use energy and result in increased CO_2 emissions. The provision of aggregates is however required in order to achieve other sustainability objectives. Making better use of recycled aggregates and secondary mineral products will reduce the sub-region's reliance on importing new minerals, which would help minimise the transportation of minerals. The aim will thereby help minimise carbon emissions. It is however recognised that mineral resources are not always found where they are accessible by non-road modes of transport. The aim may not therefore increase the use of sustainable transport modes. This reduces the level of certainty of the impact on this objective.	

18. To minimise the risk of flooding and increase the use of SUDS.	+	+	+	Medium	GM wide	Long term		The aim states that the spatial planning framework will ensure that the environment is protected from the impacts of minerals development. This should ensure that minerals developments do not increase the risk of flooding.	The aim has been appraised in two stages. Following the first appraisal, the wording of the aim has been strengthened in relation to protecting the environment from the impacts of minerals developments.
19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	+ +	+ +	+ +	High	GM wide	Long term	Reduced requirement to identify additional waste landfill sites for unwanted aggregates.	Primary aggregates are a finite resource. The aim strives to reduce reliance on primary minerals by facilitating the better use of recycled aggregates and secondary mineral products. It will therefore support the objective of using natural resources prudently and reduce the amount of inert waste produced.	
20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	+	+	+	Medium	GM wide	Long term	Positive secondary impacts on congestion, carbon emissions and air quality.	Making better use of recycled aggregates and secondary mineral products will reduce the need to consume energy importing new minerals into Greater Manchester.	
Sustainability Summary	The Aim has the potential to have a positive impact on a wide range of sustainability objectives. In particular, by facilitating the use of recycled aggregates and secondary mineral products and delivering a steady supply of minerals to meet Greater Manchester's needs, 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 and some positive impact on the objective of encouraging sustainable economic growth. By minimising the need for new primary extraction, the Aim is 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. The strengthening of the reference to ensuring the environment and community are protected from the impacts of minerals development should also ensure that the Aim has a positive impact on the objectives relating to physical and mental health; protecting biodiversity, protected species, habitats and sites of geological importance; protecting landscape and townscape character; protecting local environmental quality; protecting the quality of controlled waters; and minimising the risk of flooding. There are no anticipated negative or uncertain effects on the sustainability objectives.								

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

A2. POLICIES

Policy 1: Key Planning and Environmental Criteria									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	?	?	?	Low	GM wide	Long term		The policy will restrict the areas within Greater Manchester where minerals can be worked. Given that minerals can only be worked where they are found, the policy could lead to some mineral reserves not being worked. The policy would therefore have an uncertain impact on the sub-objective of promoting growth in the minerals sector. It may however have a positive impact on the sub-objective of increasing mineral re-use and recycling.	It is recognised that the approach set out in the policy is necessary to ensure mineral workings and infrastructure contribute positively to sustainable development. As such, no mitigation measures are recommended.
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	?	?	?	Low	GM wide	Long term		The policy will restrict the areas within Greater Manchester where minerals can be worked. Given that minerals can only be worked where they are found, the policy could lead to some mineral reserves not being worked. As a result, the policy could potentially have a negative impact on the sub-objective of encouraging sustainable economic growth through provision of adequate mineral reserves.	It is recognised that the approach set out in the policy is necessary to ensure mineral workings and infrastructure contribute positively to sustainable development. As such, no mitigation measures are recommended.
3. To develop and market Greater Manchester's image.	+	+	+	High	GM wide	Long term	Improved quality of life and perceptions of the area.	The policy would prevent minerals developments that would have an unacceptable impact on a range of criteria that contribute positively to the sub-region's image.	

4. To develop and maintain a healthy labour market.	?	?	?	Low	GM wide	Long term		The policy will restrict the areas within Greater Manchester where minerals can be worked. Given that minerals can only be worked where they are found, the policy could lead to some mineral reserves not being worked. As a result, the policy could potentially restrict employment opportunities.	It is recognised that the approach set out in the policy is necessary to ensure mineral workings and infrastructure contribute positively to sustainable development. As such, no mitigation measures are recommended.
Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	?	?	?	Low	GM wide	Long term	Secondary impacts associated with climate change.	The policy will restrict the areas within Greater Manchester where minerals can be worked. Given that minerals can only be worked where they are found, the policy could lead to some mineral reserves not being worked. As a result, the policy may increase the need for minerals to be imported into the sub-region.	It is recognised that the approach set out in the policy is necessary to ensure mineral workings and infrastructure contribute positively to sustainable development. As such, no mitigation measures are recommended.
6. To improve physical health and mental health and reduce health inequalities.	+	+	+	High	GM wide	Long term	Improved quality of life	The policy states that proposals for minerals working or the provision of minerals infrastructure will not be permitted where it would have an unacceptable impact on amenity.	
7. To improve access to good quality affordable and resource efficient housing.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+	+	+	High	GM wide	Long term	Secondary impacts on the image of the sub-region	The policy states that proposals for minerals working or the provision of minerals infrastructure will not be permitted where it would have an unacceptable impact on the historic environment and built heritage that could not be mitigated. As such, the policy should ensure that the cultural, built environment and archaeological assets are protected from minerals developments.	
11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	+	+	+	High	GM wide	Long term	Improved image of the sub-region	The policy states that proposals for minerals working or the provision of minerals infrastructure will not be permitted where it would have an unacceptable impact on biological and geological conservation that could not be mitigated. This should ensure that biodiversity, protected species, habitats and sites of geological importance are protected from the impacts associated with minerals developments.	

12. To protect and improve landscape and townscape character and accessibility.	+	+	+	High	GM wide	Long term	Improved image of the sub-region	The policy states that proposals for minerals working or the provision of minerals infrastructure will not be permitted where it would have an unacceptable impact on landscape and visual intrusion that could not be mitigated. It also states that proposals for minerals working or the provision of minerals infrastructure will not be permitted where it would have an unacceptable impact on access which should ensure that proposals do not have an unacceptable impact on the accessibility of the landscape.	
13. To protect and improve local environmental quality and reduce crime.	+	+	+	High	GM wide	Long term	Improved quality of life and perceptions of the area.	The policy would prevent minerals developments that would have an unacceptable impact on a range of criteria that contribute to local environmental quality.	
14. To protect and improve the quality of controlled waters.	+	+	+	High	GM wide	Long term	Positive impact on biodiversity	The policy states that proposals for minerals working or the provision of minerals infrastructure will not be permitted where it would have an unacceptable impact on the protection of controlled waters that could not be mitigated.	

15. To protect and improve air quality.	+	+	+	Low	GM wide	Long term	Positive impact on health, particularly amongst those who suffer from respiratory illnesses.	The policy states that proposals for minerals working or the provision of minerals infrastructure will not be permitted where it would have an unacceptable impact in terms of dust emissions that could not be mitigated. The list of issues to be considered does not however make reference to air quality and, as a result, the certainty of this impact is considered to be low.	Include air quality in the list of criteria to be taken into consideration.
16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	+	+	+	High	GM wide	Long term	Improved image of the sub-region	The policy states that proposals for minerals working or the provision of minerals infrastructure will not be permitted where it would have an unacceptable impact on land instability and the best and most versatile agricultural land.	The publication version of the Minerals Plan has been appraised in two stages. During the first stage of this appraisal it was noted that the list of issues to be considered did not include agricultural land. A reference to this has now been incorporated.
17. To mitigate and adapt to climate change.	?	?	?	Low	GM wide	Long term	Secondary impacts associated with climate change.	The policy will restrict the areas within Greater Manchester where minerals can be worked. Given that minerals can only be worked where they are found, the policy could lead to some mineral reserves not being worked. As a result, the policy may increase the need for minerals to be imported into the sub-region, which could increase greenhouse gas emissions associated with the transportation of minerals.	It is recognised that the approach set out in the policy is necessary to ensure mineral workings and infrastructure contribute positively to sustainable development. As such, no mitigation measures are recommended.

18. To minimise the risk of flooding and increase the use of SUDS.	+	+	+	High	GM wide	Long term		The policy states that proposals for minerals working or the provision of minerals infrastructure will not be permitted where it would have an unacceptable impact on flood risk management that could not be mitigated.	
19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	?	?	?	Low	GM wide	Long term		The policy will restrict the areas within Greater Manchester where minerals can be worked. Given that minerals can only be worked where they are found, the policy could lead to some mineral reserves not being worked.	
20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	?	?	?	Low	GM wide	Long term	Secondary impacts associated with climate change.	The policy will restrict the areas within Greater Manchester where minerals can be worked. Given that minerals can only be worked where they are found, the policy could lead to some mineral reserves not being worked. As a result, the policy may increase the need for minerals to be imported into the sub-region, which could increase energy use associated with the transportation of minerals.	It is recognised that the approach set out in the policy is necessary to ensure mineral workings and infrastructure contribute positively to sustainable development. As such, no mitigation measures are recommended.

Sustainability Summary	The policy relating to Key Planning and Environmental Criteria would have a positive impact on a range of sustainability objectives. In particular, the policy would ensure that proposals minerals workings and minerals infrastructure do not have an unacceptable impact on a wide range of assets. As such, it is considered that the policy would have a positive impact on the objectives relating to physical and mental health; cultural, built heritage; biodiversity and geodiversity; townscapes and landscapes; local environmental quality; water quality; air quality; land and soil; flood risk; and developing Greater Manchester's image. It is however noted that the list of criteria does not make a specific reference to air quality and it is recommended that this is added to the list of considerations included within the policy. There are no negative on the sustainability objectives. The policy would however have an uncertain impact on a wide range of objectives. By protecting a wide range of natural and historic environment assets the policy would restrict the areas within Greater Manchester where minerals can be worked. Given that minerals can only be worked where they are found, the policy could therefore lead to some mineral reserves not being worked. As a result, it is considered that the policy would have an uncertain impact on the objectives relating to exploiting the growth potential of business sectors; encouraging sustainable economic growth; developing and maintaining a healthy labour market; reducing the need to travel; mitigating climate change; ensuring the prudent use of natural resources; and minimising the requirement for energy use. It is however recognised that the approach set out in the policy is necessary to ensure mineral workings and minerals infrastructure contribute positively to sustainable development. As such, no mitigation measures are recommended to address this.

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

Policy 2: Primary Extraction of Minerals - Aggregates									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	+	+	+	Low	GM wide	Long term		The policy would provide a mechanism to support applications for minerals extraction where there is a demonstrable need for the mineral and an adequate reserve of the mineral. The policy would therefore promote growth in the minerals sector. Nevertheless, the policy would not necessarily increase the usage of recycled/secondary products and therefore there is only limited certainty that the policy would have a positive impact on this objective.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	+	+	+	Medium	GM wide	Long term		The policy would provide a mechanism to support applications for minerals extraction where there is a demonstrable need for the mineral. This would encourage sustainable economic growth through provision of adequate mineral reserves.	

3. To develop and market Greater Manchester's image.	+	+	+	Medium	GM wide	Long term	Positive impact on perceptions of the sub region.	The policy specifies that the extraction and/or processing of sand, gravel or sandstone/gritstone, irrespective of whether it is within an Area of Search, will only be permitted where it is in accordance with the Key Planning and Environmental Criteria set out in Policy 1. This will support the preservation and/or enhancement of high quality built, natural and historic environments.	
4. To develop and maintain a healthy labour market.	+	+	+	Medium	GM wide	Long term		The policy would provide a mechanism to support applications for minerals extraction where there is a demonstrable need for the mineral. This would support the creation of employment opportunities in the minerals sector.	
Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	+	+	+	Low	GM Wide	Medium term	Reduced congestion and associated secondary impacts on air quality and climate change.	The policy provides a mechanism to enable new minerals extraction in Greater Manchester where an adequate mineral reserve is identified and there is a demonstrated need for the mineral. This could reduce the need to import sand, gravel or sandstone/gritstone from outside the sub-region. The level of certainty is however reduced by the fact that minerals can only be worked where they are found and that they may not be found in locations that are accessible by non-road modes of transport.	

6. To improve physical health and mental health and reduce health inequalities.	+	+	+	High	GM wide	Long term	Improved quality of life	The policy specifies that the extraction and/or processing of sand, gravel or sandstone/gritstone, irrespective of whether it is within an Area of Search, will only be permitted where it is in accordance with the Key Planning and Environmental Criteria set out in Policy 1. This is likely to ensure that minerals developments do not have an unacceptable impact on local communities through, for example, noise, dust, vibrations or odours.	
7. To improve access to good quality affordable and resource efficient housing.	+	+	+	Medium	GM wide	Long term	Improved quality of life	Allocations for development, including housing, made in Development Plans would be identified as a constraint when identifying Areas of Search. It is therefore unlikely that a potential housing site would be 'lost' to minerals development. In addition, the provision of aggregates is necessary for the provision of new houses.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+ +	+ +	+ +	Medium	GM wide	Long term	Positive impact on perceptions of the sub region.	The policy specifies that the extraction and/or processing of sand, gravel or sandstone/gritstone will only be permitted where the proposal would be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These include the impact of the proposal on the historic environment and built heritage. In addition, it is noted that National Trust sites, Conservation Areas and Listed Buildings have all been excluded from the Areas of Search.	
11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	+ +	+ +	+ +	Medium	GM wide	Long term	Positive impact on perceptions of the sub region.	The policy specifies that the extraction and/or processing of sand, gravel or sandstone/gritstone will only be permitted where the proposal would be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These include the impact of the proposal on the historic biological and geological conservation. In addition, sites designated for their nature conservation value (including SPAs, SACs, SSSIs, SBIs and Local Nature Reserves) are listed as absolute constraints for the Areas of Search for sand, gravel or sandstone/gritstone.	

12. To protect and improve landscape and townscape character and accessibility.	+ +	+ +	+ +	Medium	GM wide	Long term	Positive impact on perceptions of the sub region.	The policy specifies that the extraction and/or processing of sand, gravel or sandstone/gritstone will only be permitted where the proposal would be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These criteria include the impact of the proposal on landscape and visual intrusion. Furthermore, the National Park, country parks and the urban area would all be excluded from the Areas of Search, which increases the likelihood of these areas being protected from minerals development. It is however recognised that minerals extraction has the potential to reduce landscape accessibility if it leads to the extinguishment of public rights of way.	Ensure proposals for minerals working or the provision of minerals infrastructure are required to retain existing local access routes or amend them to maintain a similar level of access.
13. To protect and improve local environmental quality and reduce crime.	+	+	+	Medium	GM wide	Long term	Positive impact on perceptions of the sub region.	The policy specifies that the extraction and/or processing of sand, gravel or sandstone/gritstone will only be permitted where the proposal would be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. This should ensure that the factors that contribute to local environmental quality are protected.	

14. To protect and improve the quality of controlled waters.	+	+	+	Medium	GM wide	Long term	Positive impact on biodiversity and perceptions of the sub region.	The policy specifies that the extraction and/or processing of sand, gravel or sandstone/gritstone will only be permitted where the proposal would be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These criteria include the impact of the proposal on the quality of controlled waters. Specific references are also made in the supporting text to ensuring minerals developments do not adversely affect a significant water resource. River valleys are also identified as a location where the MPA would prefer mineral working not to take place.	
15. To protect and improve air quality.	+	+	+	Medium	GM wide	Long term	Positive impact on health, particularly amongst those who suffer from respiratory illnesses.	The policy specifies that the extraction and/or processing of sand, gravel or sandstone/gritstone will only be permitted where the proposal would be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. This should ensure that the air quality is protected.	

16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	+	+	+	Medium	GM wide	Long term	Positive impact on biodiversity	Grade 1 and 2 agricultural land would be excluded from Areas of Search and areas of Grade 3a agricultural land would be identified as a location where the Minerals Planning Authority would prefer mineral working not to take place. In addition, the policy specifies that the extraction and/or processing of sand, gravel or sandstone/gritstone will only be permitted where the proposal would be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These criteria include the impact of the proposal on the best and most versatile agricultural land. The policy will therefore increase the likelihood of land resources being protected.	

17. To mitigate and adapt to climate change.	+	+	+	Medium	GM Wide	Medium term		Minerals extraction and processing activities would both use energy and result in increased CO_2 emissions. The provision of aggregates is however required in order to achieve other sustainability objectives. Nevertheless, the policy provides a mechanism to enable new minerals extraction in Greater Manchester where an adequate mineral reserve is identified and there is a demonstrated need for the mineral. This could reduce the need to import sand, gravel or sandstone/gritstone from outside the sub-region and would reduce carbon emissions associated with the transportation of minerals. Climate change is likely to compound existing pressures on habitats and species. Excluding sites designated for their nature conservation value from the Areas of Search will reduce the likelihood of species being placed under additional pressure from minerals development	
18. To minimise the risk of flooding and increase the use of SUDS.	+	+	+	Medium	GM wide	Long term	Positive impact on perceptions of the sub region.	The policy specifies that the extraction and/or processing of sand, gravel or sandstone/gritstone will only be permitted where the proposal would be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These criteria include the impact of the proposal on flood risk management.	

19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	+	+	+	Low	GM Wide	Medium term		The policy provides a mechanism to enable new minerals extraction in Greater Manchester where an adequate mineral reserve is identified. This should reduce the likelihood of minerals resources being needlessly sterilised. It would not however minimise the demand for raw materials or promote the use of locally arising recycled and secondary materials. The certainty of the impact on this objective is therefore low.	
20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	+	+	+	Medium	GM Wide	Medium term	Reduced energy consumption	The policy provides a mechanism to enable new minerals extraction in Greater Manchester where an adequate mineral reserve is identified and there is a demonstrated need for the mineral. This could reduce the need to import sand, gravel or sandstone/gritstone from outside the sub-region and would reduce energy use associated with the transportation of minerals.	

Sustainability Summary	Policy 2 would have a positive impact on a number of objectives. By identifying the parts of the sub-region that have the least constraints and by providing a mechanism to support applications for minerals extraction where there is a demonstrable need for the mineral, the policy would support growth in the minerals sector and thereby have a positive effect on the objectives relating to exploiting the growth potential of business sectors and promoting sustainable economic growth. The policy states that applications for the extraction and/or processing of sand, gravel or sandstone/gritstone will only be permitted where the proposal would be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. In addition, a wide range of natural and historic environment assets would be excluded from the Areas of Search and other sensitive areas where the Minerals Planning Authority would prefer mineral working not to take place are also identified, which should help support their protection. As a result, it is anticipated that the policy would have a major positive impact on the objectives relating to cultural and built environment assets; biodiversity and sites of geological importance and landscape and townscape character, and some positive impact on the objectives relating to Greater Manchester's image; physical and mental health; access to services and amenities; climate change; restoring and protecting land; and the quality of controlled waters. Furthermore, by providing a mechanism to enable the sub-region to meet any shortfall in minerals provision, the policy will reduce the amount of minerals that need to be imported from outside Greater Manchester. Consequently, it is envisaged that the policy would also have a positive impact on the objectives relating to reducing the need to travel; climate change and energy use. There are no negative effects on the sustainability objectives.

Key for effects					
++ major positive;	+ minor positive;	0 neutral;	– minor negative;	– – major negative;	? uncertain

Policy 3: Natural Building Stone									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	+	+	+	Medium	GM wide	Long term		The policy provides a flexible approach that enables natural building stone to be extracted to meet the ad hoc nature of demand and variable nature of the resource. This should promote growth in the minerals sector.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	+	+	+	Medium	GM wide	Long term		The policy provides a flexible approach that enables natural building stone to be extracted to meet the ad hoc nature of demand and variable nature of the resource. This should encourage sustainable economic growth through provision of adequate mineral reserves.	
3. To develop and market Greater Manchester's image.	+	+	+	Low	GM Wide	Long term	Positive impact on sense of place.	The policy provides a mechanism to ensure that there is a supply of natural stone for the conservation and restoration of the historic built environment. There is however only limited certainty over the impact of the policy on this objective as the study to identify sites within the sub-region that provide stone for heritage purposes has not yet been completed. The extent to which the stone used for conservation projects is obtained from sites within the sub-region is therefore uncertain.	

4. To develop and maintain a healthy labour market.	+	+	+	Medium	GM wide	Long term		The policy provides a flexible approach that enables natural building stone to be extracted to meet the ad hoc nature of demand and variable nature of the resource. This should promote growth in the minerals sector.	
Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	+	+	+	Low	GM wide	Long term	Positive impact on air quality and carbon emissions	The policy provides a mechanism for natural building stone to be worked where there is viable mineral for extraction. It could therefore enable Greater Manchester to meet a greater proportion of its own minerals needs and minimise the need to import minerals into the sub-region. There is however only limited certainty over the impact of the policy on this objective as the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, the extent to which the stone used for conservation projects in Greater Manchester is obtained from sites within the sub-region is presently uncertain.	

6. To improve physical health and mental health and reduce health inequalities.	+	+	+	Medium	GM wide	Medium term	Improved quality of life.	The policy specifies that proposals for the working of natural building stone will only be permitted where the working process is in accordance with the Key Planning and Environmental Criteria as set out in Policy 1, which include the impact of the proposal on amenity. The policy should therefore ensure that the extraction of natural building stone does not have a detrimental impact on the physical and mental health of local communities.	
7. To improve access to good quality affordable and resource efficient housing.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+	+	+	Low	GM Wide	Long term	Improved perceptions of the area. Positive impact on sense of place.	The policy provides a mechanism to ensure that there is a supply of natural stone for the conservation and restoration of the historic built environment. There is however only limited certainty over the impact of the policy on this objective as the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. The extent to which the stone used for conservation projects in Greater Manchester is obtained from sites within the sub-region is therefore uncertain.	
11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	+	+	+	Medium	GM wide	Long term		The policy specifies that the working of natural building stone will only be permitted where the working process is in accordance with the Key Planning and Environmental Criteria as set out in Policy 1, which include the impact of the proposal on biological and geological conservation The policy should therefore ensure that proposals to work natural building stone do not have an unacceptable impact on biodiversity, protected species, habitats and sites of geological importance.	

12. To protect and improve landscape and townscape character and accessibility.	+	+	+	Medium	GM wide	Long term	Improved perceptions of the sub-region.	The policy specifies that the working of natural building stone will only be permitted where the working process is in accordance with the Key Planning and Environmental Criteria as set out in Policy 1, which include the impact of the proposal on landscape and visual intrusion. The policy should therefore ensure that proposals to work natural building stone do not have an unacceptable impact on landscape and townscape character and accessibility.	
13. To protect and improve local environmental quality and reduce crime.	+	+	+	Medium	GM wide	Long term	Improved perceptions of the sub-region.	The policy specifies that the working of natural building stone will only be permitted where the working process is in accordance with the Key Planning and Environmental Criteria as set out in Policy 1, which should ensure that proposals to work natural building stone do not have an unacceptable impact on local environmental quality.	
14. To protect and improve the quality of controlled waters.	+	+	+	Medium	GM wide	Long term	Positive secondary impacts on biodiversity	The policy specifies that the working of natural building stone will only be permitted where the working process is in accordance with the Key Planning and Environmental Criteria as set out in Policy 1, which include the impact of the proposal on controlled waters. The policy should therefore ensure that the extraction of natural building stone does not have a detrimental impact on the quality of controlled waters.	

15. To protect and improve air quality.	+	+	+	Medium	GM wide	Long term	Positive secondary impacts on health	The policy specifies that the working of natural building stone will only be permitted where the working process is in accordance with the Key Planning and Environmental Criteria as set out in Policy 1, which should ensure that proposals do not have an unacceptable impact on air quality.	
16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	+	+	+	Medium	GM wide	Long term		The policy specifies that the working of natural building stone will only be permitted where the working process is in accordance with the Key Planning and Environmental Criteria as set out in Policy 1, which should ensure that proposals to work natural building stone do not have an unacceptable impact on the protection of land stability and the best and most versatile agricultural land.	

17. To mitigate and adapt to climate change.	+	+	+	Low	GM wide	Long term		Minerals extraction and processing activities would both use energy and result in increased CO_2 emissions. The provision of aggregates is however required in order to achieve other sustainability objectives. Nevertheless, the policy provides a mechanism for natural building stone to be worked where there is viable mineral for extraction. It could therefore enable Greater Manchester to meet a greater proportion of its own minerals needs and minimise the need to import minerals into the sub-region. There is however only limited certainty over this impact as the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. The extent to which the stone used for conservation projects in Greater Manchester is obtained from sites within the sub-region is therefore presently uncertain.	
18. To minimise the risk of flooding and increase the use of SUDS.	+	+	+	Medium	GM wide	Long term		The policy specifies that the working of natural building stone will only be permitted where the working process is in accordance with the Key Planning and Environmental Criteria as set out in Policy 1, which include the impact of the proposal on flood risk management. The policy should therefore ensure that the extraction of natural building stone does not have a detrimental impact on flood risk.	

19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	+	+	+	Medium	GM wide	Long term		The policy provides a flexible approach that enables natural building stone to be extracted to meet the ad hoc nature of demand and variable nature of the resource.	
20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	+	+	+	Low	GM wide	Long term		The policy provides a mechanism for natural building stone to be worked where there is viable mineral for extraction. It could therefore enable Greater Manchester to meet a greater proportion of its own minerals needs and minimise the need to import minerals into the sub-region. There is however only limited certainty over the impact of the policy on this objective as the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, the extent to which the stone used for conservation projects in Greater Manchester is obtained from sites within the sub-region is presently uncertain.	

Sustainability Summary	The policy has the potential to have a positive impact on a number of sustainability objectives, particularly those relating to economic issues. By providing a flexible approach that enables natural building stone to be extracted to meet the ad hoc nature of demand and variable nature of the resource, it is anticipated that the policy will support growth in the minerals sector and it is therefore considered that the policy should have a positive impact on the objectives relating to exploiting the growth potential of businesses; encouraging sustainable economic growth; and developing and maintaining a healthy labour market. The policy provides a mechanism for natural building stone to be worked where there is viable mineral for extraction. It could therefore ensure that there is a supply of natural stone for the conservation and restoration of the historic built environment and reduce the need to import minerals into the sub-region. As a result, it is anticipated that the policy could have a positive impact on the objectives relating to developing Greater Manchester's image; reducing the need to travel; protecting, enhancing and restoring the rich diversity of cultural, built environment; mitigating climate change; and minimising the requirement for energy use. Nevertheless, the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, the extent to which the stone used for conservation projects in Greater Manchester is obtained from sites within the sub-region is presently unknown. There is therefore only limited certainty over the impact of the policy on these objectives. By specifying that proposals for the working of natural building stone will only be permitted where they are in accordance with the Key Planning and Environmental Criteria as set out in Policy 1 of the Plan, the policy is likely to have some positive impact on the objective relating to protecting physical and mental health; protecting and enhancing biodiversity; protecting and improving landscape and townscape character; protecting local environmental quality; protecting and improving the quality of controlled waters; restoring and protecting land and soil; protecting air quality; and minimising the risk of flooding. There are no negative or uncertain effects on the sustainability objectives.

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

Policy 4: Development Outside Areas of Search									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	+	+	+	Medium	GM wide	Long term	Increased employment opportunities and prosperity	The policy provides a mechanism for allowing non-aggregates to be worked where there are adequate mineral reserves on site in terms of quality and quantity. It could therefore have a positive impact on growth in the minerals sector and support the sub-objective of enabling new mineral extraction technologies to be developed and utilised.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	+	+	+	Medium	GM wide	Long term	Increased employment opportunities and prosperity	The policy provides an mechanism to ensure that economic growth is supported through the provision of adequate mineral reserves.	
3. To develop and market Greater Manchester's image.	+	+	+	Medium	GM wide	Long term		The policy requires proposals for the primary extraction of non-aggregates to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. This should ensure that proposals do not result in unacceptable visual intrusion or have an unacceptable effect on the built environment and the landscape.	
4. To develop and maintain a healthy labour market.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	+	+	+	Low	GM wide	Long term	Positive impact on air quality and carbon emissions	The policy provides a mechanism for allowing non-aggregates to be worked where there are adequate mineral reserves on site in terms of quality and quantity. It could therefore enable Greater Manchester to meet a greater proportion of its own minerals needs and minimise the need to import minerals into the sub-region.	
6. To improve physical health and mental health and reduce health inequalities.	+	+	+	High	GM wide	Long term	Improved quality of life	The policy requires proposals for the primary extraction of non-aggregates to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. This will ensure that proposals for the primary extraction of non-aggregates do not have an unacceptable impact on health.	
7. To improve access to good quality affordable and resource efficient housing.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+	+	+	High	GM wide	Long term	Secondary impacts on the image of the sub-region	The policy requires proposals for the primary extraction of non-aggregates to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These criteria include the impact of the proposal on the historic environment and built heritage.	
11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	+	+	+	High	GM wide	Long term	Improved image of the sub-region	The policy requires proposals for the primary extraction of non-aggregates to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These criteria include the impact of the proposal on biological and geological conservation.	
12. To protect and improve landscape and townscape character and accessibility.	+	+	+	High	GM wide	Long term	Improved image of the sub-region	The policy requires proposals for the primary extraction of non-aggregates to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These criteria include the impact of the proposal on the landscape and visual intrusion.	
13. To protect and improve local environmental quality and reduce crime.	+	+	+	High	GM wide	Long term	Improved quality of life and perceptions of the area.	The policy requires proposals for the primary extraction of non-aggregates to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. The impact of the application on factors that contribute to local environmental quality would be considered when making this assessment.	

14. To protect and improve the quality of controlled waters.	+	+	+	High	GM wide	Long term	Positive impact on biodiversity	The policy requires proposals for the primary extraction of non-aggregates to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These criteria include the impact of the proposal on the protection of controlled waters.	
15. To protect and improve air quality.	+	+	+	Medium	GM wide	Long term	Positive impact on health, particularly amongst those who suffer from respiratory illnesses.	The policy requires proposals for the primary extraction of non-aggregates to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. The list of criteria to be considered makes a specific reference to dust. In addition, the policy could reduced the need to import minerals into the sub-region and could thereby help minimise emissions associated with the transportation of minerals.	
16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	+	+	+	Medium	GM wide	Long term	Positive impact on biodiversity	The policy requires proposals for the primary extraction of non-aggregates to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. Issues such as the impact of the proposal on land instability and the best and most versatile agricultural land would be considered when making this assessment.	

17. To mitigate and adapt to climate change.	+	+	+	Low	GM wide	Long term		Minerals extraction and processing activities would both use energy and result in increased CO_2 emissions. The provision of aggregates is however required in order to achieve other sustainability objectives. The policy provides a mechanism for allowing non-aggregates to be worked where there are adequate mineral reserves on site in terms of quality and quantity. It could therefore enable Greater Manchester to meet a greater proportion of its own minerals needs and minimise the need to import minerals into the sub-region.	
18. To minimise the risk of flooding and increase the use of SUDS.	+	+	+	Medium	GM wide	Long term		The policy requires proposals for the primary extraction of non-aggregates to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. Flood risk management would be one issue that would be taken into consideration when making this assessment.	
19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	+	+	+	Medium	GM wide	Long term		The policy provides a mechanism to enable minerals to be extracted if there is an adequate mineral reserve in terms of quality and quantity.	

20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	+	+	+	Low	GM wide	Long term		The policy provides a mechanism for allowing non-aggregates to be worked where there are adequate mineral reserves on site in terms of quality and quantity. It could therefore enable Greater Manchester to meet a greater proportion of its own minerals needs and minimise the need to import minerals into the sub-region.	
Sustainability Summary	The policy relating to the primary extraction of non-aggregate minerals has the potential to have a number of positive impacts. By requiring proposals to be in accordance with the Key Planning and Environmental Criteria contained within Policy 1, it is considered that the policy would provide additional protection to communities and the environment from the potential negative impacts associated with minerals development. As such, it is envisaged that the policy would have a positive impact on the objectives relating to physical and mental health; protecting the cultural, built environment; biodiversity and geodiversity; townscapes and landscapes; local environmental quality; water quality; air quality; land and soil; flood risk; and developing Greater Manchester's image. In addition, by providing a mechanism for allowing additional sites to be worked where there is an adequate reserve of the mineral in terms of quality and quantity, the policy has the potential to impact positively on the objectives of exploiting the growth potential of business sectors; encouraging sustainable economic growth; and ensuring the prudent use of natural resources. It would also assist Greater Manchester in meeting a greater proportion of its own minerals needs and thereby minimise the need to import minerals into the sub-region. This would have a positive impact on the objectives of reducing the need to travel; mitigating climate change; and minimising the requirement for energy use. Although it is acknowledged that the certainty of this impact on these objectives is low due to uncertainty over whether proposals for the primary extraction of non-aggregate minerals will come forward during the plan period. There are no negative or uncertain effects on the sustainability objectives. As such, no mitigation measures are recommended.								

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

Policy 5: Unconventional Gas Resources									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	+	+	+	Medium	GM wide	Long term	Increased job opportunities and prosperity	Supporting the exploration and production of unconventional gas could support the growth potential of businesses by diversifying the minerals sector. Identifying the full extent of the coalfield will support the development and utilisation of new and innovative mineral extraction technologies.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	+	+	+	Medium	GM wide	Long term	Reduced deprivation	The policy would support economic growth through supporting the diversification of the minerals sector and the creation of employment opportunities.	
3. To develop and market Greater Manchester's image.	+	+	+	Medium	GM wide	Long term		The policy would ensure that unconventional gas exploration and production is only permitted where it is environmentally acceptable and where all equipment is removed afterwards and the site restored in accordance with a scheme and to a standard approved by the Minerals Planning Authority. This will support the preservation of high quality built and natural environments.	The policy has been appraised in two stages. Following the first appraisal, the wording has been amended so that it no longer requires sites to be restored to their original land use. This improves the level of certainty that the policy would have a positive impact on this objective. No mitigation measures are therefore proposed.

4. To develop and maintain a healthy labour market.	+	+	+	Medium	GM wide	Long term	Reduced deprivation	The policy could result in the provision of a range of employment opportunities in the minerals sector.	
Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
6. To improve physical health and mental health and reduce health inequalities.	+	+	+	Medium	GM wide	Long term	Positive impact on quality of life	Unconventional gas extraction can be a source of noise and vibration. However, the policy specifies that applications for exploration and production wells will only be permitted where they are in accordance with the Key Planning and Environmental Criteria as set out in Policy 1, which include the impact of the proposal on amenity.	
7. To improve access to good quality affordable and resource efficient housing.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+	+	+	Medium	GM wide	Long term	Positive impact on perceptions of the area	The policy recognises that international and national heritage designations are likely to affect any proposed production and processing sites for unconventional gas. The policy should therefore provide protection to built heritage and archaeological assets. The policy also specifies that applications for unconventional gas exploration and production will only be permitted where they are in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These considerations include the impact of the proposal on the historic environment and built heritage.	
11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	+	+	+	Medium	GM wide	Long term	Positive impact on perceptions of the area	The policy specifies that applications for unconventional gas exploration and production will only be permitted where they are in accordance with the Key Planning and Environmental Criteria set out in Policy 1. These include the impact of the proposal on biological and geological conservation. The policy also recognises that international and national environmental designations are likely to affect any proposed production and processing sites. This should ensure that biodiversity, protected species, habitats and sites of geological importance are protected.	

12. To protect and improve landscape and townscape character and accessibility.	+	+	+	Medium	GM wide	Long term	Positive impact on perceptions of the area.	The policy specifies that applications for unconventional gas exploration and production wells will only be permitted where they include detailed plans for the removal of all equipment and the restoration of the site to a standard approved by the Minerals Planning Authority. It also requires applications for unconventional gas exploration and production wells to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1, which include the impact of the proposal on landscape and visual intrusion.	
13. To protect and improve local environmental quality and reduce crime.	+	+	+	Medium	GM wide	Long term	Positive impact on perceptions of the area.	The policy specifies that applications for unconventional gas exploration and production wells will only be permitted where they are in accordance with the Key Planning and Environmental Criteria set out in Policy 1. This should ensure that local environmental quality is protected.	
14. To protect and improve the quality of controlled waters.	+	+	+	Medium	GM wide	Long term	Secondary impacts on biodiversity.	The policy specifies that applications for unconventional gas exploration and production wells will only be permitted where they are in accordance with the Key Planning and Environmental Criteria set out in Policy 1. This should ensure that the quality of controlled waters is protected.	

15. To protect and improve air quality.	+	+	+	Medium	GM wide	Long term	Secondary impacts on health, particularly amongst those who suffer from respiratory illnesses.	The policy specifies that applications for unconventional gas exploration and production wells will only be permitted where they are in accordance with the Key Planning and Environmental Criteria set out in Policy 1. This should ensure that air quality is protected.	
16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	+	+	+	Medium	GM wide	Long term		The policy specifies that applications for unconventional gas exploration and production wells will only be permitted where they are in accordance with the Key Planning and Environmental Criteria set out in Policy 1 and include detailed plans for the restoration of the site. By identifying the full extent of the coalfield the policy increases the likelihood of applications for unconventional gas exploration coming forward on brownfield as opposed to greenfield sites.	The policy has been appraised in two stages. Following the first appraisal, the wording has been amended so that it no longer requires sites to be restored to their original land use. This improves the level of certainty that the policy would have a positive impact on this objective. No mitigation measures are therefore proposed.
17. To mitigate and adapt to climate change.	-	-	-	Low	National	Long term	Negative secondary impacts associated with climate change, such as increased flood risk	The burning of fossil fuels, such as coal bed methane and coal mine methane, is a major contributor to climate change. Recovering unconventional gas resources increases the likelihood of the UK being 'locked into' dependence on fossil fuels. It may therefore have a negative impact on the sub-objective of minimising greenhouse gas emissions. It is however recognised that the importation of energy minerals from outside the UK would have a markedly greater impact on the objective of mitigating climate change.	National policy states that the Minerals Plan should not predetermine the appropriate levels of unconventional gas to be produced. No mitigation is therefore proposed.

18. To minimise the risk of flooding and increase the use of SUDS.	+	+	+	Medium	GM wide	Long term	Secondary impacts on biodiversity.	The policy specifies that applications for unconventional gas exploration and production wells will only be permitted where they are in accordance with the Key Planning and Environmental Criteria set out in. This should ensure that water abstraction, run-off and recharge are maintained within carrying capacity	
19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	+ +	+ +	+ +	High	GM wide	Long term	Diversification of the UK energy mix and a positive impact on energy security.	The policy would lead to recovery of unconventional gas resources that may have otherwise remained unused. It would thereby support the prudent use of natural resources.	
20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	-	-	-	Low	National	Long term	Negative secondary impacts associated with climate change, such as increased flood risk	The burning of fossil fuels, such as coal bed methane and coal mine methane, is a major contributor to climate change. Recovering unconventional gas resources increases the likelihood of the UK being 'locked into' dependence on fossil fuels. It would therefore have a negative impact on the sub-objective of minimising the use of fossil fuels. It is however recognised that the importation of energy minerals from outside the UK would have a markedly greater impact on the objective of mitigating climate change.	National policy states that the Minerals Plan should not predetermine the appropriate levels of unconventional gas to be produced. No mitigation is therefore proposed.

Sustainability Summary	The policy on unconventional gas resources would have a positive impact on a wide range of sustainability objectives. By leading to the recovery of unconventional gas that would have otherwise remained unused, the policy 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. By supporting the exploration and production of unconventional gas the policy could also support economic growth and the diversification of the minerals sector. As such, it is envisaged that the policy is likely to have a positive effect on the objectives relating to exploiting the growth potential of business sectors; encouraging sustainable economic growth; and developing and maintaining a healthy labour market. The policy specifies that applications for unconventional gas exploration and production wells will only be permitted where they are in accordance with the Key Planning and Environmental Criteria in Policy 1. It also states that applications must be accompanied by detailed plans for the removal of all equipment and the restoration of the site to a standard approved by the Mineral Planning Authority. Consequently, it is concluded that the policy has the potential to have some positive impact on the objectives relating to Greater Manchester's image; health; the historic environment; biodiversity; landscape and townscape character; local environmental quality; air quality; flood risk; and the quality of controlled waters. The burning of fossil fuels, such as coal bed methane and coal mine methane, is a major contributor to climate change. Supporting the extraction and use of unconventional gas resources therefore has the potential to have a negative impact on the objectives relating to mitigating climate change and energy use. It is however recognised that the importation of energy minerals from outside the UK would have a markedly greater impact on the objective of mitigating climate change. Furthermore, it is noted that national policy stipulates that the Minerals Plan should not predetermine the appropriate level of unconventional gas to be produced. No mitigation measures to address this potential impact are therefore proposed.

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

Policy 6: Peat									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	0	0	0	High	N/A	N/A		Existing planning permissions for peat extraction are considered to be sufficient to meet the horticultural industries needs. As a result, limiting peat extraction to where it is necessary to facilitate restoration is unlikely to have a significant effect on the growth potential of business sectors.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	0	0	0	High	N/A	N/A		Existing planning permissions for peat extraction are considered to be sufficient to meet the horticultural industries needs. As a result, limiting peat extraction only to instances where it is necessary to facilitate restoration is unlikely to have a significant effect on sustainable economic growth.	
3. To develop and market Greater Manchester's image.	+	+	+	Medium	Local	Long term		The proposed approach would lead to the protection of high quality natural environments, which will enhance Greater Manchester's image.	
4. To develop and maintain a healthy labour market.	0	0	0	High	N/A	N/A		Existing planning permissions for peat extraction are considered to be sufficient to meet the horticultural industries needs. As a result, limiting peat extraction only to instances where it is necessary to facilitate restoration is unlikely to have a significant effect on the labour market.	

Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	0	0	0	High	N/A	N/A		Existing planning permissions for peat extraction are considered to be sufficient to meet the horticultural industries needs. Limiting peat extraction in Greater Manchester to instances where it is necessary to facilitate restoration is therefore unlikely to increase the need to import peat into the sub-region. It is however noted that peat may however still need to be imported into the sub-region in order to provide blending material.	
6. To improve physical health and mental health and reduce health inequalities.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
7. To improve access to good quality affordable and resource efficient housing.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+	+	+	Low	Local	Long term	Enhanced perceptions of the sub-region	Restricting peat extraction to instances where a site has previously been worked for peat and where extraction is necessary to restore the site should ensure the protection of any intact archaeological remains that are present in peat bogs.	

11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	+ +	+ +	+ +	Medium	GM wide	Long term	Enhanced perceptions of the sub-region Improved adaptation to climate change	Peat bogs tend to have high biodiversity value. The policy would restrict peat extraction to sites which have been previously worked for peat and would limit the removal of peat to what is necessary to facilitate the restoration of the site. Whilst it is recognised that any peat that would be removed is in itself likely to be of importance to biodiversity, specifying that any extraction must be the minimum required to restore a site to lowland raised bog should ensure that the policy has a significant positive impact on biodiversity, particularly as lowland raised bog is a UK BAP priority habitat and is included in the list of protected habitats in Annex 1 of the European Habitats Directive.	
12. To protect and improve landscape and townscape character and accessibility.	+	+	+	High	GM wide	Long term	Enhanced perceptions of the sub-region	The policy will help protect the appearance of the sub-region's countryside, particularly the peat bogs in Bolton, Wigan and Salford, by restricting peat extraction to instances where a site has previously been worked for peat and where the site is to be restored to lowland raised bog.	
13. To protect and improve local environmental quality and reduce crime.	+	+	+	Medium	Local	Long term		The policy will have a positive impact on environmental quality, particularly in parts of Bolton, Salford and Wigan, through leading to the protection of peat bogs and only permitting the removal of peat where it is necessary to restore the site to lowland raised bog.	

14. To protect and improve the quality of controlled waters.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
15. To protect and improve air quality.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	+ +	+ +	+ +	Medium	GM wide	Long term	Enhanced perceptions of the sub-region	The policy will lead to the long-term protection of peat bogs by only permitting the removal of peat where it is necessary to restore the site. It will also allow for the restoration of degraded sites to lowland raised bog.	
17. To mitigate and adapt to climate change.	+ +	+ +	+ +	Medium	National	Long term		Restricting peat extraction to instances where a site has previously been worked for peat and where extraction is necessary to restore the site to lowland raised bog will reduce the likelihood of peat bogs being worked. This will enable them to continue to function as a 'carbon sink' and store carbon that would otherwise be emitted to the atmosphere.	
18. To minimise the risk of flooding and increase the use of SUDS.	+ +	+ +	+ +	Medium	Local	Long term	Improved adaptation to climate change	Peat bogs provide potentially important water storage, which can reduce surface water run-off and the risk of flooding. Restricting new peat workings to where these are necessary for restoration will increase the likelihood of peat bogs continuing to fulfil this role.	
19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	+ +	+ +	+ +	Medium	Local	Long term		Relying on existing planning permissions for peat, which are sufficient to meet demand, will ensure that peat resources are used wisely and will encourage the development of substitute products.	

20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	+	+	+	Medium	GM wide	Long term		Restricting peat extraction to instances where a site has previously been worked for peat and where extraction is necessary to restore the site to lowland raised bog will reduce the likelihood of peat bogs being worked. This will enable them to continue to function as a 'carbon sink' and store carbon that would otherwise be emitted to the atmosphere. The policy would therefore have a positive impact on the sub-objective of reducing greenhouse gas emissions.	
Sustainability Summary	Policy 6 would deliver a number of significant sustainability benefits. In particular, by restricting peat extraction to sites which have been previously worked for peat and by limiting the removal of peat to only what is necessary to facilitate the restoration of the site, the policy will lead to the protection of high quality natural environments and increase the likelihood of peat bogs continuing to function as a 'carbon sink'. As a result, it is anticipated that the policy would have a major positive impact on the objectives relating to mitigating climate change; ensuring the prudent use of natural resources; minimising the risk of flooding; and restoring and protecting land and soil; and some positive impact on the objectives relating to developing Greater Manchester's image; protecting local environmental quality; protecting landscapes; and protecting archaeological assets. Whilst it is recognised that all peat is likely to be of value to biodiversity, specifying that any peat extraction must be the minimum required to restore a previously worked site to lowland raised bog should ensure that the policy has a major positive impact on the objective relating to biodiversity, protected species and habitats, particularly as lowland raised bog is a UK BAP priority habitat and is included in the list of protected habitats in Annex 1 of the European Habitats Directive. Relying on existing planning permissions for peat, which are sufficient to meet demand, will ensure that peat resources are used wisely. In addition, as existing planning permissions for peat extraction run until 2042 and are considered to be sufficient to meet the horticultural industries needs up to that time, it is envisaged that limiting peat extraction to instances where it is necessary to facilitate the restoration of a site that has previously been worked for peat is unlikely to have a significant impact on the objectives relating to exploiting the growth potential of business sectors; encouraging sustainable economic growth and developing and maintaining a healthy labour market. There are no anticipated negative or uncertain effects on the sustainability objectives.								

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

A3. MINERAL SAFEGUARDING AREAS

Policy 7: Mineral Safeguarding Areas									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	+	+	+	Low	GM wide	Long term		The policy will prevent minerals from being sterilised unnecessarily. This would support growth in the minerals sector and enable new mineral extraction technologies to be developed and utilised. The exclusion of the urban area within the Mineral Safeguarding Area (MSA) may however mean that some opportunities for prior extraction on regeneration projects and brownfield sites are missed. However, it is recognised that there have been limited examples of extraction taking place in the urban area in Greater Manchester. The policy also notes that the exclusion of the urban area does not mean that prior extraction of minerals is wholly unsuitable in this location. The policy may however discourage the development of markets for recycled/secondary products. This reduces the certainty that the policy would have a positive impact on this objective.	

2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	+	+	+	Medium	GM wide	Long term	Positive impact on prosperity and job creation.	The policy will ensure that minerals are not sterilised unnecessarily, which will ensure economic growth is not constrained by an inadequate provision of mineral reserves. The policy would also ensure that other development is not restricted where the need for that development outweighs the need to extract the mineral.	
3. To develop and market Greater Manchester's image.	+	+	+	Medium	GM wide	Long term		The policy would not require minerals to be extracted prior to a non-minerals development taking place in a MSA if prior extraction would have an unacceptable impact on the Key Planning and Environmental Criteria set out in Policy 1.	
4. To develop and maintain a healthy labour market.	+	+	+	Medium	GM wide	Long term	Reduced deprivation	Encouraging the prior extraction of viable mineral resources prior to non-minerals development taking place in a MSA would help meet any shortfalls in provision. This should lead to the creation of a number of employment opportunities.	
Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	+	+	+	Medium	GM wide	Long term	Reduced congestion and greenhouse gas emissions.	The policy would ensure minerals are not sterilised unnecessarily. This could reduce the need to import minerals from outside the sub-region, which will help minimise the transportation of minerals.	

6. To improve physical health and mental health and reduce health inequalities.	+	+	+	Medium	GM wide	Long term	Positive secondary impacts on quality of life	The policy would not require the prior extraction of minerals in a MSA if prior extraction would have an unacceptable environmental impact. In addition, excluding urban areas from the MSA reduces the likelihood of communities being affected by the potential nuisances associated with minerals development, such as dust and noise.	
7. To improve access to good quality affordable and resource efficient housing.	+	+	+	Medium	GM wide	Long term	Positive impact on quality of life.	The policy should help ensure that there are sufficient minerals to support the ambitious growth strategy for Greater Manchester. Householder developments are listed as 'exempt development'. Homeowners who live within a MSA will still therefore be able to make alterations/extension to their property without needing to submit information on the viability of extracting the mineral resource.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		The policy does not preclude the provision of improved services and facilities if there is an overriding need for such a development.	

Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+	+	+	Medium	GM wide	Long term		The policy would not require minerals to be extracted prior to a non-minerals development taking place in a MSA if prior extraction would have an unacceptable environmental impact. This will ensure that the cultural, built environment will be protected. Applications for Conservation Area Consent and Listed Building Consent are exempt from the policy. Therefore, many proposals to protect/enhance the character and appearance of historic buildings and conservation areas will not be delayed by a requirement to submit information on the viability of extracting mineral resources. Furthermore, the policy specifies that proposals for prior extraction must be in accordance with the Key Planning and Environmental Criteria set out in Policy 1, which include the impact of the proposal on the historic environment and built heritage.	

11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	+	+	+	Medium	GM wide	Long term		The policy would not require minerals to be extracted prior to a non-minerals development taking place in a MSA if prior extraction would have an unacceptable environmental impact. Furthermore, the policy specifies that proposals for prior extraction must be in accordance with the Key Planning and Environmental Criteria set out in Policy 1, which include the impact of the proposal on biological and geological conservation.	
12. To protect and improve landscape and townscape character and accessibility.	+	+	+	Medium	GM wide	Long term		The policy would not require the prior extraction of minerals in a MSA if prior extraction would have an unacceptable environmental impact. This is likely to ensure that the quality of landscapes and townscapes are protected. In addition, it is specified that proposals for the prior extraction of minerals will only be permitted where they are in accordance with the Key Planning and Environmental Criteria contained within Policy 1. These criteria include the impact of the proposal on landscape and visual intrusion.	
13. To protect and improve local environmental quality and reduce crime.	+	+	+	Medium	GM wide	Long term		The policy would not require minerals to be extracted prior to a non-minerals development taking place in a MSA if prior extraction would have an unacceptable environmental impact.	

14. To protect and improve the quality of controlled waters.	+	+	+	Medium	GM wide	Long term		The policy would not require minerals to be extracted prior to a non-minerals development taking place in a MSA if prior extraction would have an unacceptable environmental impact. This is likely to ensure that the quality of controlled waters is protected. In addition, it is specified that proposals for the prior extraction of minerals will only be permitted where they are in accordance with the Key Planning and Environmental Criteria contained within Policy 1. These criteria include the impact of the proposal on the protection of controlled waters.	
15. To protect and improve air quality.	+	+	+	Medium	GM wide	Long term	Positive impact on health, particularly among those who suffer from respiratory illnesses	The policy would ensure that minerals are not sterilised unnecessarily. This could reduce the likelihood of the sub-region becoming more reliant on minerals from outside Greater Manchester, which will help minimise the transportation of minerals. In addition, the policy would prevent the prior extraction of minerals where it would not be environmentally acceptable.	

16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	+	+	+	Medium	GM wide	Long term		The prior extraction of minerals can support land remediation or stabilisation schemes. As such, the policy could help manage contaminated and potentially unstable land. It is recognised that the exclusion of the urban area from the MSA may mean that some opportunities for prior extraction as part of a land remediation or stabilisation scheme are missed. The policy does however note that the exclusion of the urban area does not mean that prior extraction of minerals is wholly unsuitable in this location.	
17. To mitigate and adapt to climate change.	+	+	+	Medium	GM wide	Long term		The policy will ensure minerals are not sterilised unnecessarily. This could reduce Greater Manchester's reliance on importing new minerals from outside the sub-region, which will help minimise energy use and greenhouse gas emissions associated with the transportation of minerals.	
18. To minimise the risk of flooding and increase the use of SUDS.	+	+	+	Medium	GM wide	Long term		The policy would not require minerals to be extracted prior to a non-minerals development taking place in a MSA if prior extraction would have an unacceptable environmental impact. In addition, it is specified that proposals for the prior extraction of minerals will only be permitted where they are in accordance with the Key Planning and Environmental Criteria contained within Policy 1. These criteria include the impact of the proposal on flood risk management.	

19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	+ +	+ +	+ +	Medium	GM wide	Long term		The policy would help ensure mineral resources are safeguarded and not sterilised unnecessarily by encouraging the extraction of any viable mineral resources prior to non-minerals development taking place. Although the urban area would be excluded from the MSA, it is recognised that there have been limited examples of extraction taking place in the urban area in Greater Manchester. In addition, the policy notes that the exclusion of the urban area does not mean that prior extraction of minerals is wholly unsuitable in this location.	
20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	+	+	+	Medium	GM wide	Long term	Reduced greenhouse gas emissions	The policy will ensure minerals are not sterilised unnecessarily. This would reduce the likelihood of Greater Manchester becoming reliant on importing minerals from outside the sub-region, which will help minimise energy use associated with the transportation of minerals.	

Sustainability Summary	By preventing Greater Manchester's mineral resources from being sterilised unnecessarily, the Mineral Safeguarding Areas (MSAs) policy 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. The policy would also reduce the likelihood of the sub-region becoming more dependent on minerals from outside Greater Manchester. It is therefore anticipated that the policy would have a positive impact on the objectives relating to reducing the need to travel; mitigating climate change; and decreasing the need to consume energy. The policy would not require minerals to be extracted prior to a non-minerals development taking place in a MSA if prior extraction would have an unacceptable environmental impact. In addition, it requires proposals for the prior extraction of minerals to be in accordance with the Key Planning and Environmental Criteria set out in Policy 1. Consequently, it is anticipated that the policy would have a positive impact on the objectives relating to Greater Manchester's image; built heritage; biodiversity, protected species and habitats; landscape and townscape character; local environmental; the quality of controlled waters; air quality; managing contaminated and potentially unstable land; and minimising flood risk. In addition, the exclusion of the urban areas from the MSA reduces the likelihood of communities being affected by the potential nuisances associated with minerals development, such as dust and noise. It is therefore envisaged that the policy would also have some positive impact on the objective relating to improving physical and mental health. By ensuring that minerals are not unnecessarily sterilised, the policy on Mineral Safeguarding Areas would also help ensure that economic growth is not constrained by an inadequate provision of mineral reserves. This would have a positive impact on the economic objectives relating to the sustainable economic growth and developing a healthy labour market. It is however acknowledged that the requirement to explore the opportunities for prior extraction of minerals could result in delays to some developments, which reduces the level of certainty over the impact on these objectives. The policy will prevent minerals from being sterilised unnecessarily and provides a mechanism to meet any shortfall in minerals provision during the plan period. It is therefore envisaged that the policy would have a positive impact on the objective of exploiting the growth potential of business sectors. The exclusion of the urban area from the MSA may mean that some opportunities for prior extraction on regeneration projects and brownfield sites are missed. Nevertheless, it is recognised that there have been limited examples of extraction taking place in the urban area in Greater Manchester and the supporting text to the policy states that the exclusion of the urban area does not mean that prior extraction of minerals is wholly unsuitable in this location. There are no negative or uncertain effects on the sustainability objectives.

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

A4. DEVELOPMENT MANAGEMENT

Policy 8: Sustainable Transport of Minerals									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	0	0	0	Medium	N/A	N/A		The policy would not require minerals to be transported by more sustainable modes where it would be so costly as to render the minerals development unviable. Therefore, it is unlikely to have any significant effects on the growth potential of business sectors.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	0	0	0	Medium	N/A	N/A		The policy would not require minerals to be transported by more sustainable modes where it would be so costly as to render the minerals development unviable. Therefore, it is unlikely to have any significant effects on economic growth by affecting the provision of adequate mineral reserves.	
3. To develop and market Greater Manchester's image.	+	+	+	Low	GM wide	Long term	Improved quality of life. Improved perceptions of the area.	The policy would help protect the character and quality of settlements from the traffic associated with the transportation of minerals by road. The level of certainty of this impact is only low however as there are likely to be a number of instances where the transportation of minerals by rail or canal is not feasible or economically viable.	
4. To develop and maintain a healthy labour market.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	

Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	+	+	+	Low	GM wide	Long term	Reduce congestion and carbon emissions.	The policy would support sustainable transport use and minimise the amount of minerals that are transported by road. It would not however appear to have any significant impact on the objective of reducing the need to travel or the sub-objective of minimising the transportation of minerals where possible. This reduces the level of certainty that the policy would have a positive impact on this objective.	
6. To improve physical health and mental health and reduce health inequalities.	+	+	+	Medium	GM wide	Long term	Improved quality of life	The policy would prevent minerals development involving the transport of minerals by road if the traffic generated would have an unacceptable impact on local residents, the environment or road safety. This should reduce nuisances associated with minerals development and thereby help protect physical and mental health.	
7. To improve access to good quality affordable and resource efficient housing.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
12. To protect and improve landscape and townscape character and accessibility.	+	+	+	Medium	GM wide	Long term	Improved perceptions of the area.	The policy would prevent minerals development involving the transport of minerals by road if the traffic generated would have an unacceptable impact on the environment. This would ensure that landscape and townscape character is protected.	
13. To protect and improve local environmental quality and reduce crime.	+	+	+	Medium	GM wide	Long term	Improved perceptions of the area.	The policy would prevent minerals development involving the transport of minerals by road if the traffic generated would have an unacceptable impact on the environment. This would ensure that the quality of the local environment is protected.	

14. To protect and improve the quality of controlled waters.	0	0	0	Medium	N/A	N/A		Increasing the use of canals to transport minerals has the potential to have a detrimental impact on water quality. Nevertheless, policies in the districts Core Strategies, together with other legislation that is in place, should ensure that water quality is adequately protected.	
15. To protect and improve air quality.	+	+	+	High	GM wide	Long term	Positive secondary impact on health, particularly amongst those who already suffer from respiratory illnesses.	The policy encourages the transportation of minerals by more sustainable means and states that the transport of minerals by road will only be acceptable where the traffic generated would not have an unacceptable impact on the local environment. As a result, the transportation of minerals by road would not be permitted where it would have an unacceptable impact on air quality.	
16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
17. To mitigate and adapt to climate change.	+	+	+	Low	National	Long term		The policy encourages the transportation of minerals by more sustainable means in preference to road transport. This would help reduce greenhouse gas emissions associated with the transportation of minerals. The level of certainty of this impact is only low however as there are likely to be a number of instances where the transportation of minerals by rail or canal is not feasible or economically viable.	

18. To minimise the risk of flooding and increase the use of SUDS.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	+	+	+	Low	GM wide	Long term	Reduced carbon emissions	The policy would increase the efficient use of energy in the transportation of minerals by encouraging more sustainable alternatives to road transport. The level of certainty of this impact is only low however as there are likely to be a number of instances where the transportation of minerals by rail or canal is not feasible or economically viable.	
Sustainability Summary	The policy relating to the transport of minerals would have a positive impact on a number of the sustainability objectives. In particular, by encouraging the transportation of minerals by more sustainable modes in preference to road transport, the policy would have a positive impact on the objectives relating to the use of sustainable transport modes; mitigating climate change; and promoting the efficient use of energy. Nevertheless, the level of certainty of this impact is low due to the fact that there are likely to be a number of instances where the transportation of minerals by rail or canal is not feasible or economically viable. The policy would prevent minerals development involving the transport of minerals by road if the traffic generated would have an unacceptable impact on local residents, through for example noise, dust or vibrations, or road safety. Therefore, it is concluded that the policy is likely to have a positive impact on the objective relating to physical and mental health. The policy would also prevent minerals development involving the transport of minerals by road if the traffic generated would have an unacceptable impact on the environment. As a result, it is concluded that the policy is likely to have a positive impact on the objectives relating to developing Greater Manchester's image, protecting local environmental quality, protecting air quality and protecting townscape character. The policy would not require minerals to be transported by sustainable means where it would be so costly as to render the minerals development unviable. As a result, it is envisaged that the policy would not have a negative impact on the economic objectives of exploiting the growth potential of business sectors, encouraging sustainable economic growth or developing a healthy labour market. It is therefore considered that the policy would have no negative or uncertain effects on the sustainability objectives.								

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

Policy 9: Reworking of Colliery Spoil Tips									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	+	+	+	Low	GM wide	Long term	Increased job opportunities and prosperity	Reworking of colliery spoil tips could support the growth potential of business sectors by providing additional opportunities in the minerals sector. However, the certainty of this impact is reduced by the fact that the policy now specifies that reworking will only be permitted where it is demonstrated that it is necessary to restore the tip to remedy environmental defects.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	+	+	+	Low	GM wide	Long term	Reduced deprivation	The policy would support economic growth by providing additional opportunities in the minerals sector and through the creation of associated employment opportunities. However, the certainty of this impact is reduced by the fact that the policy now specifies that reworking will only be permitted where it is demonstrated that it is necessary to restore the tip to remedy environmental defects.	

3. To develop and market Greater Manchester's image.	+	+	+	Low	GM wide	Long term		The policy specifies that reworking will only be permitted where it would not have an unacceptable impact on the Key Planning and Environmental Criteria listed in Policy 1 that cannot be mitigated; these include the impact of the proposal on landscape and visual intrusion. The policy should therefore provide protection to colliery spoil tips where these have become an established feature with landscape value. However, the policy now no longer requires the reworking of colliery tips to result in a visual improvement to the area which reduces the certainty of the impact on this objective.	Consider adding 'and improve the visual amenity of the area' to the second criteria in the policy.
4. To develop and maintain a healthy labour market.	+	+	+	Medium	GM wide	Long term	Reduced deprivation	The policy could result in the provision of a range of employment opportunities in the minerals sector.	

Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	-	-	-	Low	GM wide	Long term	Increased congestion and disturbance due to HGV movements unless more sustainable modes of transport are used.	There are no coal-fired power stations in Greater Manchester. Therefore, coal recovered from colliery spoil tips would need to be transported to coal-fired power stations outside the sub-region. It is however recognised that the only alternative to incremental coal output in the UK is the import of coal over long distances and that this would have a markedly more significant negative impact on the sub objective of minimising the transportation of minerals.	The promotion of the use of sustainable modes of transporting coal out of Greater Manchester by the Plan will help address some of the impacts.
6. To improve physical health and mental health and reduce health inequalities.	+	+	+	High	GM wide	Long term		The reworking of colliery spoil tips would potentially be a source of noise and dust which could have a negative impact on health. Nevertheless, the policy specifies that reworking will only be permitted where it would not have an unacceptable impact that cannot be mitigated on the Key Planning and Environmental Criteria listed in Policy 1; these include the impact of the proposal on amenity.	
7. To improve access to good quality affordable and resource efficient housing.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+	+	+	High	GM wide	Long term		The policy specifies that reworking will only be permitted where it would not have an unacceptable impact that cannot be mitigated on the Key Planning and Environmental Criteria listed in Policy 1; these include the impact of the proposal on the historic environment and built heritage.	
11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	+	+	+	High	GM wide	Long term	Secondary impact on perceptions of the area	Reworking of colliery spoil tips can have an adverse impact on established wildlife and biodiversity value. Nevertheless, the policy specifies that reworking will only be permitted where it would not have an unacceptable impact on the Key Planning and Environmental Criteria listed in Policy 1 that cannot be mitigated; these include the impact of the proposal on biological and geological conservation. In addition, the subsequent restoration schemes could create new habitats.	Ensure appropriate ecological surveys are conducted prior to development. Policy 12 in the Plan seeks to ensure that restored minerals sites, including reworked colliery spoil tips, provide for the enhancement of biodiversity assets, European Sites and the ecological value of the site.

12. To protect and improve landscape and townscape character and accessibility.	+ +	+ +	+ +	Medium	GM wide	Long term	Secondary impact on perceptions of the area	Reworking colliery spoil tips is likely to have a significant visual impact. Nevertheless, the policy specifies that reworking will only be permitted where it would not have an unacceptable impact on the Key Planning and Environmental Criteria listed in Policy 1 that cannot be mitigated; these include the impact of the proposal on landscape and visual intrusion. The policy should therefore provide protection to colliery spoil tips where these have become an established feature with landscape value. However, the policy no longer requires the reworking of colliery tips to result in a visual improvement to the area which reduces the certainty of the impact on this objective.	Consider adding 'and improve the visual amenity of the area' to the second criteria in the policy. Policy 12 in the Plan seeks to ensure that restored minerals sites, including reworked colliery spoil tips, provide for the enhancement of the quality of the landscape.
13. To protect and improve local environmental quality and reduce crime.	+	+	+	Low	GM wide	Long term	Secondary impact on perceptions of the area	The policy specifies that reworking will only be permitted where it would not have an unacceptable impact on the Key Planning and Environmental Criteria listed in Policy 1 that cannot be mitigated; these include the impact of the proposal on landscape and visual intrusion. The policy should therefore provide protection to colliery spoil tips where these have become an established feature with landscape value. However, the policy no longer requires the reworking of colliery tips to result in a visual improvement to the area which reduces the certainty of the impact on this objective.	Consider adding 'and improve the visual amenity of the area' to the second criteria in the policy. Policy 12 in the Minerals Plan seeks to ensure that minerals sites, including reworked colliery spoil tips, are appropriately restored once operations have ceased.

14. To protect and improve the quality of controlled waters.	+	+	+	Medium	GM wide	Long term	Secondary impacts on biodiversity	The excavation and movement of spoil could result in surface water runoff being contaminated with solids in suspension. Nevertheless, spoil tips that are not presently worked could potentially be an existing source of water pollution. Therefore, the reworking of these tips may offer the potential to address existing environmental issues. Furthermore, the policy specifies that the reworking of colliery spoil tips will only be permitted where it is necessary to restore the tip to remedy environmental defects.	
15. To protect and improve air quality.	-	-	-	Medium	GM wide	Long term	Potential negative impact on health, particularly amongst those who already suffer from respiratory illnesses.	As there are no coal-fired power stations in Greater Manchester, coal obtained from reworked colliery spoil tips would need to be transported to coal-fired power stations outside the sub-region, which could have a detrimental impact on air quality. In addition, the physical restoration of reworked colliery spoil tips has the potential to generate dust.	The promotion of the use of sustainable modes of transporting coal out of Greater Manchester by the Plan will help address some of these impacts.
16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	+ +	+ +	+ +	Medium	GM wide	Long term	Improved perceptions of the area	The policy would support the restoration of land that has been badly degraded through its use as a colliery spoil tip. It is also likely to reduce the need for new extraction sites.	Policy 11 in the Minerals Plan seeks to ensure that minerals sites, including reworked colliery spoil tips, are appropriately restored once reworking operations have ceased.

17. To mitigate and adapt to climate change.	-	-	-	Low	National	Long term	Negative secondary impacts associated with climate change, such as increased flood risk	The Energy White Paper recognises that coal will remain an important part of the UK's energy mix. Nevertheless, the burning of fossil fuels, such as coal, is a major contributor to climate change. Recovering coal from colliery spoil tips increases the likelihood of the UK being 'locked into' dependence on fossil fuels. In addition, as there are no coal-fired power stations in Greater Manchester, coal recovered from the sub-region would need to be transported to coal-fired power stations outside the sub-region. It is however recognised that the only alternative to incremental coal output in the UK is the import of coal over long distances which would have a more significant negative impact on greenhouse gas emissions.	National planning guidance stipulates that the planning system should not predetermine the appropriate levels of coal to be produced by underground or opencast mining. The promotion of sustainable modes of transporting coal out of Greater Manchester by the Plan will help address some of the impacts.
18. To minimise the risk of flooding and increase the use of SUDS.	+	+	+	Medium	GM wide	Long term		Restoration schemes are likely to be accompanied by appropriate drainage systems. The policy also specifies that reworking will only be permitted where it would not have an unacceptable impact on the Key Planning and Environmental Criteria listed in Policy 1 that cannot be mitigated; these include the impact of the proposal on flood risk management.	

19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	+ +	+ +	+ +	Medium	GM wide	Long term	Positive impact on energy security	The policy would lead to recovery of coal that would have otherwise remained unused and would thereby support the prudent use of natural resources. However, the certainty of this impact is reduced by the fact that the policy now specifies that reworking will only be permitted where it is demonstrated that it is necessary to restore the tip to remedy environmental defects.	
20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	-	-	-	Low	National	Long term	Negative secondary impacts associated with climate change, such as increased flood risk	The Energy White Paper recognises that coal will remain an important part of the UK's energy mix. Nevertheless, the burning of fossil fuels, such as coal, is a major contributor to climate change. Recovering coal from colliery spoil tips increases the likelihood of the UK being 'locked into' dependence on fossil fuels. It is however recognised that the only alternative to incremental coal output in the UK is the import of coal over long distances which would have a more significant negative impact on greenhouse gas emissions.	National planning guidance stipulates that the planning system should not predetermine the appropriate levels of coal to be produced by underground or opencast mining. Therefore, no mitigation is proposed.

Sustainability Summary	Policy 9 would have a positive impact on a number of the economic objectives. It would lead to recovery of coal that would have otherwise remained unused. It would thereby 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. It would also provide additional opportunities in the minerals sector and result in the creation of a number of employment opportunities. As such, the policy is likely to have a positive impact on the objectives relating to exploiting the growth potential of business sectors; promoting sustainable economic growth; and developing and maintaining a healthy labour market. Nevertheless, it is considered that the certainty that the policy would have a positive impact on each of these objectives is reduced by the fact that the policy now specifies that reworking will only be permitted where it is necessary to restore the tip to remedy environmental defects, which may reduce the number of instances in which colliery spoilt tips are reworked. The policy would support the restoration of land that has been badly degraded through its use as a colliery spoil tip and would potentially reduce the need for new extraction sites. It is therefore anticipated that the policy would have a major positive affect on the objective relating to restoring and protecting land and soil and managing contaminated and unstable land. The policy specifies that the reworking of colliery spoil tips will only be permitted if it is compliant with the Key Planning and Environmental Criteria listed in Policy 1. In addition, the policy stipulates that the reworking of spoil tips will only be permitted where it is necessary to restore the tip to remedy environmental defects. As a result, it is envisaged that the policy would have a major positive impact on the objective relating to protecting and improving landscape character and a positive impact on the objective relating to protecting, enhancing and restoring biodiversity, protected species and habitats; local environmental quality; and the quality of controlled waters. It is however noted that the policy no longer makes reference to the reworking of colliery tips resulting in a visual improvement to the area. This reduces the level of certainty that the policy would have on the objectives relating to the image of Greater Manchester; landscape character; and local environmental quality. The policy has the potential to give rise to a number of negative impacts. There are no coal-fired power stations in Greater Manchester and, as a result, coal obtained from reworked colliery spoil tips would need to be transported to coal-fired power stations outside of the sub-region. As a result, the policy could potentially have a negative effect on the objectives relating to air quality; reducing the need to travel; mitigating climate change; and minimising the requirement for energy use. The promotion of the use of sustainable modes of transporting coal out of Greater Manchester by the Plan will however address some of these concerns. It is also recognised that the only alternative to incremental coal output in the UK is to import of coal over long distances which would have a more significant negative impact on greenhouse gas emissions and energy use. Recovering coal from colliery spoil tips also increases the likelihood of the UK being 'locked into' dependence on fossil fuels, which would have an adverse impact on the objectives relating to climate change and energy use. Nevertheless, as national guidance stipulates that the planning system should not predetermine the appropriate levels of coal to be produced, no mitigation measures are proposed to address this.

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

Policy 10: Protecting Existing Minerals Sites / Infrastructure									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	+	+	+	Medium	GM wide	Long term	Increased employment opportunities and reduced levels of deprivation	The policy will help exploit the growth potential of the minerals sector and provide protection for minerals recycling / secondary aggregates processing sites.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	+	+	+	Medium	GM wide	Long term	Increased employment opportunities and reduced levels of deprivation	The policy would prevent the development that would have an unacceptable impact on an existing mineral working. It would thereby help ensure there is an adequate supply of materials to provide the infrastructure required to support Greater Manchester's economy.	
3. To develop and market Greater Manchester's image.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
4. To develop and maintain a healthy labour market.	+	+	+	Medium	GM wide	Long term		By protecting existing minerals sites and infrastructure, such as rail linked depots, the policy would help maintain a healthy labour market.	
Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	+ +	+ +	+ +	Medium	GM wide	Long term	Reduced congestion Decreased carbon emissions.	The policy will provide protection to existing rail linked depots, wharves and canals in Greater Manchester and will thereby support the use of sustainable transport modes.	
6. To improve physical health and mental health and reduce health inequalities.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

7. To improve access to good quality affordable and resource efficient housing.	+	+	+	Medium	GM wide	Long term	Positive impact on quality of life.	The policy should help ensure that there are sufficient minerals to support the ambitious growth strategy for Greater Manchester.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		The policy does not preclude the provision of improved services and facilities if there is an overriding need for such a development.	
Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
12. To protect and improve landscape and townscape character and accessibility.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
13. To protect and improve local environmental quality and reduce crime.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
14. To protect and improve the quality of controlled waters.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	

15. To protect and improve air quality.	+	+	+	Medium	GM wide	Long term	Secondary impacts on health, particularly among those who suffer from respiratory illnesses	The policy will provide protection to existing rail linked depots, wharves and canals in Greater Manchester and will thereby support the use of sustainable transport modes as an alternative to transporting minerals by road.	
16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
17. To mitigate and adapt to climate change.	+	+	+	Medium	GM wide	Long term	Reduced secondary impacts of climate change, such as increased flood risk.	The policy will provide protection to existing rail linked depots and wharves in Greater Manchester and will thereby support the use of sustainable transport modes and help reduce greenhouse gas emissions.	
18. To minimise the risk of flooding and increase the use of SUDS.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	
19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	+ +	+ +	+ +	High	GM wide	Long term		The policy will prevent the sterilisation of mineral deposits by ensuring that development that would have an unacceptable impact on the continuation of a mineral working would only be permitted where the mineral working is no longer required or the need for the proposed development outweighs the need to continue the mineral working.	

20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	+	+	+	Medium	GM wide	Long term		The policy will provide protection to existing rail linked depots, wharves and canals in Greater Manchester and will thereby support the use of sustainable transport modes and support the objective of using energy efficiently.	
Sustainability Summary	The policy on protecting existing minerals sites and infrastructure has the potential to have a positive impact on a number of sustainability objectives. In particular, by preventing the sterilisation of mineral deposits and sites essential for the sustainable transportation of minerals, the policy has the potential to have a major positive impact on the objectives relating to ensuring the prudent use of natural resources and improving use of sustainable transport modes. The policy would also have some positive impact on the objectives relating to protecting air quality; mitigating climate change; and promoting the efficient use of energy. By preventing development that would have an unacceptable impact on existing mineral workings and providing protection for minerals recycling / secondary aggregates processing sites, the policy should help ensure there is an adequate supply of materials to provide the infrastructure required to support Greater Manchester's economy. It is therefore envisaged that the policy would also have a positive impact on the economic objectives of exploiting the growth potential of business sectors; encouraging sustainable economic growth; and maintaining a healthy labour market. There are no negative or uncertain effects on the sustainability objectives.								

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

Policy 11: Protecting Quarries Important for Maintaining Historic Buildings									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	+	+	+	Low	GM wide	Long term	Increased employment opportunities and reduced levels of deprivation	The policy will help exploit the growth potential of the minerals by providing protection to quarries that are important for maintaining historic buildings. There is however only limited certainty of this due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, it is presently uncertain whether such sites are found within the sub-region.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	+	+	+	Low	GM wide	Long term	Increased employment opportunities.	The policy would prevent the development that would have an unacceptable impact on a quarry that is important for maintaining historic buildings. This should encourage sustainable economic growth through provision of adequate mineral reserves. There is however only limited certainty of this due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, it is presently uncertain whether such sites are found within the sub-region.	

3. To develop and market Greater Manchester's image.	+	+	+	Low	GM wide	Long term	Improved perceptions of the area. Maintenance of a sense of place.	The policy would protect quarries that supply minerals that are important for maintaining historic buildings. It would thereby help protect areas that contribute to the image of the sub-region. There is however only limited certainty of this due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, it is presently uncertain whether such sites are found within the sub-region.	
4. To develop and maintain a healthy labour market.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	+	+	+	Low	GM wide	Long term	Reduced congestion Decreased carbon emissions.	By providing protection to quarries in Greater Manchester that are important for maintaining historic buildings, the policy could help reduce the need to import minerals into the sub-region and thereby have a positive impact on the sub-objective of minimising the transportation of minerals. There is however only limited certainty of this due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, it is presently uncertain whether such sites are found within the sub-region.	
6. To improve physical health and mental health and reduce health inequalities.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

7. To improve access to good quality affordable and resource efficient housing.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
9. To improve access to and use of basic goods, services and amenities for all groups.	0	0	0	High	N/A	N/A		The policy does not preclude the provision of improved services and facilities if there is an overriding need for such a development.	
Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+ +	+ +	+ +	Low	GM wide	Long term	Improved perceptions of the area. Maintenance of a sense of place.	The policy would protect quarries that supply minerals that are important for maintaining historic buildings. The policy would thereby contribute to the protection of the significance of historic assets by ensuring there is a sufficient supply of minerals for their maintenance/repair. There is however only limited certainty of this due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, it is presently uncertain whether such sites are found within the sub-region.	
11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

12. To protect and improve landscape and townscape character and accessibility.	+	+	+	Low	GM wide	Long term	Improved perceptions of the area. Maintenance of a sense of place.	The policy would protect quarries that supply minerals that are important for maintaining historic buildings. It would thereby have a positive impact on townscape character and the sub-objective of enhancing the appearance and setting of historic buildings and conservation areas. There is however only limited certainty of this due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, it is presently uncertain whether such sites are found within the sub-region.	
13. To protect and improve local environmental quality and reduce crime.	+	+	+	Low	GM wide	Long term		The policy would protect quarries that supply minerals that are important for maintaining historic buildings. It would thereby help protect areas that contribute to the image of the sub-region. There is however only limited certainty of this due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, it is presently uncertain whether such sites are found within the sub-region.	
14. To protect and improve the quality of controlled waters.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	

15. To protect and improve air quality.	+	+	+	Low	GM wide	Long term	Reduced congestion Decreased carbon emissions.	By providing protection to quarries in Greater Manchester that are important for maintaining historic buildings, the policy could help reduce the need to import minerals into the sub-region and reduce vehicular emissions associated with the transportation of minerals. There is however only limited certainty of this due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed.	
16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	0	0	0	High	N/A	N/A		Unlikely to have any significant effects.	
17. To mitigate and adapt to climate change.	+	+	+	Low	GM wide	Long term	Reduced congestion Decreased carbon emissions.	By providing protection to quarries in Greater Manchester that are important for maintaining historic buildings, the policy could help reduce the need to import minerals into the sub-region and help reduce greenhouse gas emissions associated with the transportation of minerals. There is however only limited certainty of this due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, it is presently uncertain whether such sites are found within the sub-region.	
18. To minimise the risk of flooding and increase the use of SUDS.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effects.	

19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	+ +	+ +	+ +	High	GM wide	Long term		The policy would ensure that developments that would have an unacceptable impact on a quarry that is important for maintaining historic buildings are only permitted where the mineral working is no longer required or the need for the proposed development outweighs the need to continue the mineral working. It will therefore reduce the likelihood of minerals being needlessly sterilised. The policy will also have a positive impact on the sub-objective of supporting the repair and re-use of existing buildings.	
20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	+	+	+	Low	GM wide	Long term	Reduced congestion Decreased carbon emissions.	By providing protection to quarries in Greater Manchester that are important for maintaining historic buildings, the policy could help reduce the need to import minerals into the sub-region and help reduce greenhouse gas emissions associated with the transportation of minerals. There is however only limited certainty of this due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed. As a result, it is presently uncertain whether such sites are found within the sub-region.	

Sustainability Summary	It is envisaged that Policy 11 would have a positive impact on a number of sustainability objectives. In particular, by protecting quarries that supply minerals that are important for maintaining historic buildings, the policy would contribute to the protection of the significance of historic assets by ensuring there is a sufficient supply of minerals for their maintenance/repair. The policy would therefore have a major positive impact on the objective of protecting, enhancing, managing and restoring the built environment and archaeological assets and some positive impact on the objectives relating to protecting and improving townscape character; improving local environmental quality; and developing the image of Greater Manchester. The policy would ensure that developments that have an unacceptable impact on a quarry that is important for maintaining historic buildings are only permitted where the mineral working is no longer required or the need for the proposed development outweighs the need to continue the mineral working. The policy would therefore have a major positive impact on the objective of ensuring the prudent use of natural resources and its sub-objective of supporting the repair and re-use of existing buildings and some positive impact on the economic objectives of exploiting the growth potential of business sectors and encouraging sustainable economic growth. By providing protection to quarries in Greater Manchester that are important for maintaining historic buildings, the policy could help reduce the need to import minerals into the sub-region. This would have a positive impact on the objectives relating to reducing the need to travel; protecting air quality; mitigating climate change; and promoting the efficient use of energy. There is however only limited certainty that the policy would have a positive impact on these objectives due to the fact that the study which will identify sites within Greater Manchester that provide stone for heritage purposes has not yet been completed and, as a result, it is presently uncertain whether such sites are found within the sub-region. There are no negative or uncertain effects on the sustainability objectives.

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

Policy 12: Restoration and Aftercare									
	Timescale			Nature of Effect					
SA Objective	0 – 5 years	5 – 10 years	10+ years	Certainty	Scale	Permanence	Secondary, cumulative, synergistic	Comments	Mitigation
Economic									
1. To exploit the growth potential of business sectors; increasing the usage and quality of recycled/secondary products.	?	?	?	Low	GM wide	Long term		The impact of the policy on exploiting the growth potential of business sectors is difficult to appraise meaningfully due to potential afteruses being unknown.	
2. To encourage sustainable economic growth and assist in reducing the disparities of sub-regional economic performance	?	?	?	Low	GM wide	Long term		The impact of the policy on economic growth is difficult to appraise meaningfully due to potential afteruses being unknown.	
3. To develop and market Greater Manchester's image.	+ +	+ +	+ +	High	Local	Long term	Increased investment in the sub-region	Securing the restoration of sites can have a positive impact on Greater Manchester's image by preventing dereliction and blight and by delivering, for example, high quality built or natural environments.	
4. To develop and maintain a healthy labour market.	?	?	?	Low	GM wide	Long term		The impact of the policy on Greater Manchester's labour market is difficult to appraise meaningfully due to potential afteruses being unknown.	
Social									
5. To reduce the need to travel, improve choice and use of sustainable transport modes.	0	0	0	Medium	N/A	N/A		Unlikely to have any significant effect	

6. To improve physical health and mental health and reduce health inequalities.	+	+	+	Medium	GM wide	Long term	Improved quality of life	The restoration process itself may result in some impacts on amenity. The appropriate restoration of former mineral sites will nevertheless ensure a safe landform, where potential adverse emissions or run-off are satisfactorily dealt with.	
7. To improve access to good quality affordable and resource efficient housing.	?	?	?	Low	GM wide	Long term		The impact of the policy on access to housing is difficult to appraise meaningfully due to potential afteruses being unknown.	
8. To enable groups and communities to contribute to decision-making, and to reduce social exclusion.	+	+	+	High	Local	Medium term		Putting community liaison measures in place during the operation of the site will encourage wider involvement and enable communities to contribute to, and influence, decision-making and implementation.	
9. To improve access to and use of basic goods, services and amenities for all groups.	?	?	?	Low	GM wide	Long term		The impact of the policy on access to goods and services is difficult to appraise meaningfully due to potential afteruses being unknown.	
Environmental									
10. To protect, enhance, manage and restore where appropriate, the rich diversity of cultural, built environment and archaeological assets and their settings.	+	+	+	Medium	GM wide	Long term	Positive impact on perceptions of the area.	The policy specifies that the final landuse should provide for the enhancement of the quality or setting of historic assets and must be in accordance with the Key Planning and Environmental Criteria in Policy 1; which include the impact of the proposal on the historic environment and built heritage.	

11. To protect, enhance, manage and restore where appropriate biodiversity, protected species, habitats and sites of geological importance.	+	+	+	Medium	GM wide	Long term		The policy specifies that the final land use should provide for the enhancement of biodiversity assets, European sites and the ecological value of the site. The restoration of sites would offer the potential to create unique habitats. In addition, the supporting text to the policy makes reference to the potential contribution of restored mineral extraction sites to green infrastructure.	The policy has been appraised in two stages. Following the first appraisal, references to biodiversity assets, European sites and the ecological value of the site have been incorporated. This has strengthened the performance of the policy in relation to this objective and mitigation measures are therefore no longer proposed.
12. To protect and improve landscape and townscape character and accessibility.	+ +	+ +	+ +	High	Local	Long term	Improved image of the sub-region	The policy should ensure the restoration of minerals sites to prevent dereliction and blight. This would have a positive impact on landscapes and/or townscapes. It is also specified that the final land use should take account of the landscape setting of the site and provide for the enhancement of the quality of the landscape.	
13. To protect and improve local environmental quality and reduce crime.	+	+	+	High	Local	Long term	Improved image of the sub-region	The policy should ensure the restoration of minerals sites to prevent dereliction and blight. This would have a positive impact on local environmental quality.	
14. To protect and improve the quality of controlled waters.	+	+	+	Medium	GM wide	Long term	Potential secondary benefits for biodiversity	The appropriate restoration of former mineral sites will ensure a safe landform, where potential adverse emissions or run-off are satisfactorily dealt with. In addition, it is specified that the final land use should enhance the local environment; this would include the quality of nearby water bodies.	

15. To protect and improve air quality.	?	?	?	Medium	GM wide	Long term		The impact of the policy on air quality is difficult to appraise meaningfully due to potential afteruses being unknown. The restoration process itself is however likely to result in some air emissions. However, it is specified that the final land use should be in accordance with the Key Planning and Environmental Criteria in Policy 1; which include issues such as dust emissions.	Other policies in the district's Core Strategies will prevent unacceptable impacts on air quality.
16. To restore and protect land and soil and to manage contaminated and potentially unstable land.	+ +	+ +	+ +	High	Local	Long term	Potential secondary benefits for biodiversity Potential secondary benefits for food security.	Restoring land is a key aim of aftercare schemes. The proposed use of phased restoration schemes and the provision of details on the financial provision to complete restoration schemes should ensure that schemes are implemented. Where the intention is to restore the land to agricultural uses, it is specified that the restoration techniques employed should ensure that land is capable of supporting such uses in the long term. The policy should therefore have a major positive impact on restoring land and soil.	
17. To mitigate and adapt to climate change.	?	?	?	Low	National	Long term		The impact of the policy on climate change is difficult to appraise meaningfully due to potential afteruses being unknown.	

18. To minimise the risk of flooding and increase the use of SUDS.	+	+	+	Medium	GM wide	Long term		The impact of the policy on the risk of flooding is difficult to appraise meaningfully due to potential afteruses being unknown. The supporting text to the policy does however refer to the potential contribution of restored mineral extraction sites to flood water storage. In addition, it is specified that the final landuse should be in accordance with the Key Planning and Environmental Criteria in Policy 1; which include flood risk management.	
19. To ensure the prudent use of natural resources and the sustainable management and safeguarding of existing resources.	0	0	0	High	N/A	N/A		Unlikely to have any significant effect	
20. To minimise the requirement for energy use, promote efficient use and increase the use of energy from renewable resources.	?	?	?	Low	National	Long term		The impact of the policy on the requirement for energy use is difficult to appraise meaningfully due to potential afteruses being unknown.	

Sustainability Summary	Policy 12 should ensure the restoration of minerals sites to prevent dereliction and blight and requires the final land use to contribute towards the enhancement of the landscape. This would have a significant positive impact on the objectives of developing and marketing Greater Manchester's image; protecting and improving landscape and townscape character; and restoring and protecting land and soil. The restoration of extraction sites should ensure the creation of a safe landform, where potential adverse emissions or run-off are satisfactorily dealt with. As a result, it is anticipated that the policy would also have a minor positive impact on the objectives relating to physical and mental health and protecting and improving the quality of controlled waters. The policy provides for community liaison measures to be put in place during the operation of the site, including mineral extraction, restoration and final land use. The policy would therefore encourage wider community involvement and enable communities to contribute to, and influence, decision-making and implementation. As such, it would have a positive impact on the objective of enabling groups and communities to contribute to decision-making, and reducing social exclusion. The policy should ensure the restoration of minerals sites to ensure that potential derelict sites are brought into beneficial use and it is stipulated that the final land use should provide for the enhancement of the quality of the local environment. The policy would therefore have a positive impact on the objective to protect and improve local environmental quality. The incorporation of a specific reference to the final land use providing for the enhancement of the setting of historic assets should also ensure that the policy has some positive impact on the objective of protecting and enhancing the rich cultural, built environment. Similarly, the inclusion of a requirement for the final land use to provide for the enhancement of biodiversity assets, European sites and the ecological value of the site should ensure that the policy now has some positive impact on the objective relating to the protection, enhancement and management of biodiversity, protected species and habitats and the objective of protecting and enhancing the rich cultural, built environment. 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 a wide range of sustainability objectives. As such, it is concluded that the policy would have an uncertain impact on the objectives relating to the growth potential of business sectors; sustainable economic growth; a healthy labour market; access to housing; access to basic goods, services and amenities; air quality; climate change; and the requirement for energy use.

Key for effects

++ major positive; + minor positive; 0 neutral; – minor negative; – – major negative; ? uncertain

GREATER MANCHESTER JOINT MINERALS DEVELOPMENT PLAN DOCUMENT

Main Modifications

Sustainability Appraisal Addendum

March 2012

1. Introduction

1.1 In August 2009, agreement was reached across the ten Greater Manchester authorities to prepare a joint Minerals Plan Development Plan Document (DPD) (the Minerals Plan). Once adopted, the Minerals Plan will set out the locations in Greater Manchester where mineral extraction may take place, safeguard minerals resources with potential for future extraction, and provide guidance on all aspects of environmental and resource protection including the sustainable transportation of minerals. Under Section 19(5) of the Planning and Compulsory Purchase Act 2004, where a Local Planning Authority is preparing a Development Plan Document it is mandatory for the plan to be subject to Sustainability Appraisal (SA) throughout its production, to ensure that it is fully consistent with, and helps to implement, the principles of sustainable development. The Minerals Plan was therefore subject to SA throughout its preparation.

1.2 The Minerals Plan was published in July 2011, prior to it being submitted to the Secretary of State in November 2011. The SA report was published alongside the Minerals Plan and is available to view at: http://www.gmmineralsplan.co.uk/docs.html.

1.3 A number of main modifications to the Minerals Plan are proposed following the Examination into the Minerals Plan in February 2012. These modifications are being suggested to update the Minerals Plan prior to its adoption to reflect the results of the public examination, factual amendments and errata. These modifications will be subject to consultation between Friday 3rd August 2012 and Friday 14th September.

1.4 This report has been produced to consider the implications of these main modifications for the SA of the Minerals Plan.

2. Methodology

2.1 The SA Framework, together with details of how it was developed and the methodology for the appraisal are set out in the Minerals Plan Sustainability Appraisal Scoping Report November 2009. The SA of the Plan was also informed by national guidance and best practice. The main modifications that are proposed to the Plan following the Examination have been assessed by members of the team that undertook the original SA of the Plan in order to consider whether these modifications merit further SA.

3. Main Modifications

3.1 The following table lists all the main modifications to the body of the Submission version of the Minerals Plan and whether the modifications are considered to have any significant implications for the SA of the Plan.

Change ID number	Policy/Para number	Reason for change	Suggested change	SA implications
PAMC/AGMA/3	**Policy 2 Primary Extraction of Minerals- Aggregates. Aggregate Extraction within Areas of Search**	To reflect the information set out within Appendix 1 regarding the requirement to maintain an adequate landbank for crushed rock and sand and gravel.	Policy 2 will be amended as follows: 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 ~~a demonstrated need~~ *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 reserves of the mineral, in terms of quality and quantity for extraction to take place; and 3. The proposal is in accordance with the Key Planning and Environmental Criteria in Policy 1;	The proposed modification is not considered to significantly alter the intent of the policy and it is noted that the landbank figures had previously been incorporated into Appendix 1 of the Plan. As such, it is considered that the inclusion of these figures within the policy itself is unlikely to have any significant material impact on the SA.
PAMC/AGMA/5	**Policy 12 Restoration and Aftercare**	To reflect the changes which were agreed during the Preferred Approach consultation, which are supported by the text set out within paragraph 7.28	Policy 12 will be amended as follows: 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 financial provision to be put in place to guarantee the restoration of the site;~~ 4. Details of aftercare arrangements that are to be put in place to ensure the maintenance and management of the site once restoration is	The clause in the policy that made reference to the requirement to submit details on the financial provisions to be put in place to guarantee the restoration site did not have a significant impact on the performance of the policy in the SA process. As such, the deletion of this clause from the policy is unlikely to have any significant material impact on the SA.

Change ID number	Policy/Para number	Reason for change	Suggested change	SA implications
			complete; 5. 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 1; 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.	

Change ID number	Policy/Para number	Reason for change	Suggested change	SA implications
PAMC/AGMA/24	**Policy 7, page 38**	To ensure soundness	**Policy 7** ~~**Mineral Safeguarding Areas**~~ **Prior extraction of Mineral Resources** ***Within Minerals Safeguarding Areas*** All non-mineral development proposals within the Mineral Safeguarding Area (see maps 4, 5, 6, 7 & 8) 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 1 'Key Planning and Environmental Criteria'. Proposals for non-mineral development within the Mineral Safeguarding Areas ~~which~~ *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	The policy as previously drafted noted that the exclusion of the urban area from the Mineral Safeguarding Areas (MSAs) did not mean that prior extraction of minerals was wholly unsuitable in these locations. It did therefore allow for the extraction of viable mineral resources prior to non-minerals development taking place on sites outside of MSAs. The proposed modifications to the policy make it more explicit that suitable prior extraction outside of the MSAs is to be encouraged. The modifications do not however significantly alter the intent of the policy and it is considered that they are unlikely to have any significant material impact on the performance of the policy in the SA process.

[1] Either through Site Allocation DPDs or other LDF Documents or by the developer

Change ID number	Policy/Para number	Reason for change	Suggested change	SA implications
			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*** *All non-mineral development proposals outside the Mineral Safeguarding Areas where the potential for prior extraction to take place has been identified[1], 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 1 'Key Planning and Environmental Criteria'.* *Proposals for non-mineral development outside the Mineral Safeguarding Areas as referred to in footnote[1] that do not allow for the prior extraction of minerals will only be permitted where they accord with points 1 to 4 above.*	

4. Conclusions

4.1 As noted in the table above, it is considered that all three proposed main modifications do not significantly alter the intent of the policies. Accordingly, it is concluded that the proposed main modifications are unlikely to have any material impact on the performance of the policies in the SA process and do not therefore merit further appraisal.