

DERBYSHIRE AND DERBY MINERALS LOCAL PLAN (2022-2038)

Spring 2023 Consultation

Pre-submission Draft Plan

Developing the Pre-submission Draft Plan

8.2 Conventional and Unconventional Hydrocarbons and Gas from Coal

January 2023

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1 Introduction

- 1.1 The purpose of this Paper is to show how the Proposed Draft Plan has been developed over time, through several stages of consultation, starting initially with a stakeholder workshop in 2009. It explains how national planning policy and guidance (including revisions), representations made at the consultation stages, interim sustainability appraisals and co-operation with appropriate bodies on strategic cross-border issues has been taken into account, leading to outcomes for the current strategies set out in the proposed draft plan.
- 1.2 The Paper is set out in sections for each consultation stage. Where relevant, each section is set out in the following order:
- representations from the previous stage;
 - drop-in sessions;
 - duty to co-operate issues;
 - sustainability appraisal; and
 - outcomes for the current consultation stage.

2 Stakeholder Workshop 2009

- 2.1 In July 2009, Derbyshire County and Derby City Councils held a workshop for key stakeholders. This helped to identify the key issues and themes that attendees thought the new Minerals Local Plan should address and sought the input of stakeholders in developing the vision and objectives for the Plan. The outcomes of the workshop were published on the Council's website and in a newsletter that was circulated to stakeholders.
- 2.2 These comments were taken into account in the preparation of the Issues and Options Report.

3 Issues and Options Consultation 2010

- 3.1 The Issues and Options Consultation 2010 identified two key issues for making provision for the supply of oil and gas. Issue 10 related to conventional oil and gas resources whilst Issue 11 related to the provision of hydrocarbons from new

coal exploitation technologies. The 'suggested approach' for Issue 10 was to include a policy for oil and gas developments from conventional sources which set out criteria similar to those in the existing adopted Minerals Local Plan¹ (Policies MP13 and MP35). For Issue 11 the 'suggested approach' was to include a policy for new coal exploitation technologies which sets out criteria similar to those for conventional oil and gas developments in Policy MP35 of the existing adopted Minerals Local Plan. It did not specifically address the issue of shale gas and hydraulic fracturing which was then a new issue and with little known relevance to the Plan area. Further information can be found in the following document:

Derby and Derbyshire Minerals Local Plan: Issues and Options Consultation, 2010

4 Towards a Minerals Local Plan - Rolling Consultation 2015-2017: Emerging Approach

- 4.1 After the Issues and Options consultation, the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) were published in 2012 and 2014 respectively; therefore the Councils revisited the issues and options surrounding the planning for the supply of hydrocarbons, in the light of this policy and guidance. The Councils examined the extent to which the Issues and Options consultation and the responses to it remained helpful in developing a strategy and took onboard additional evidence collected since 2010. The Councils also embarked on co-operation with other authorities on significant strategic cross border issues as required by the Localism Act 2011.
- 4.2 The next stage in preparing the Plan was the 'Towards a Minerals Local Plan: Rolling Consultation' which commenced in 2015. This Consultation consisted of a series of individual Papers. In the light of the new national policy and guidance, the MPAs were seeking to define the vision and objectives and develop strategies to achieve those objectives and deliver the vision. The

¹ Derbyshire and Derby Minerals Local Plan Adopted 2002

paragraphs below set out the outcomes for the Emerging Approach in relation to hydrocarbons, in the light of previous consultation. The complete text is set out in a Paper specifically about Hydrocarbons, three background supporting Papers were also published. Further details can be found in the following documents:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan - Rolling Consultation 2015-2016: Emerging Approach - Towards a Strategy for Hydrocarbons, November 2015.

*Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan - Rolling Consultation 2015-2016: Emerging Approach
Conventional Oil and Gas Supporting Paper, August 2015
Unconventional Gas – Gas from Coal Supporting Paper, August 2015
Unconventional Gas – Shale gas Supporting Paper, August 2015*

Representations on the Issues and Options Consultation 2010

- 4.3 There was agreement from all the respondents to the Issues and Options consultation to this question that a criterion-based policy would be the most appropriate way of dealing with the future working of hydrocarbons. No other possible options for dealing with the issue were suggested by the respondents. Further information is available in the following documents:

Responses to Derby and Derbyshire Minerals Local Plan: Issues and Options Consultation, 2011.

Duty to Co-operate

- 4.4 Duty to Co-operate is a way of planning strategically for significant cross border issues and a legal requirement of Plan preparation. In preparing the Minerals Local Plan the Councils identified the following strategic cross-boundary issues in planning for the provision of hydrocarbons.
- The supply of oil and gas from conventional sources; and
 - The supply of oil and gas from unconventional resources.

- 4.5 The Councils consulted on the duty to co-operate issues that had been identified and an approach to recording and processing those issues. Further information can be found in the following document:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan - Rolling Consultation 2015-2016: Emerging Approach - Duty to Co-operate Report, April 2016

Sustainability Appraisal (SA) of the Issues and Options Consultation 2010

- 4.6 The SA process is a way of promoting sustainable development through the better integration of sustainability considerations throughout the preparation of the Plan. The process involves testing the impact of the Plan against a series of sustainability objectives. Where the process recommends improvements to the Plan, these will be incorporated.
- 4.7 The SA concluded that for both Issue 10 and 11 the suggested approach would have similar affects to the current adopted Minerals Local Plan. Therefore, impacts on the baseline would be negligible. However, the policy is inherently positive as it helps to minimise the environmental impacts of oil and gas extraction. Allowing oil and gas extraction is inherently negative in terms of the greenhouse gas emissions created by the combustion of these fuels . The full appraisal is set out in the following document:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan - Rolling Consultation 2015-2017: Emerging Approach - 1st Interim Sustainability Appraisal (SA) Report, July 2013

Outcomes for the Towards a Minerals Local Plan - Rolling Consultation 2015-2016: Emerging Approach Towards a Strategy for Hydrocarbons, November 2015.

- 4.8 The 'Towards a Strategy Hydrocarbons Paper, November 2015' identified several issues that would need to be considered in developing a strategy to

enable the supply of hydrocarbons over the Plan period. It set out the issues surrounding the regulatory system that controls the operation of onshore oil and gas development and the role of the planning system within the wider regulatory framework. It also identified the main planning, environmental, economic and social issues that are pertinent to hydrocarbon developments. A summary of these issues is presented here as follows:

- The potential scale of the hydrocarbon resource in the Plan area. How much more may be discovered, how economical it could be to work those resources and the economic, environmental and social impacts of extraction set against the potential benefits.
- The difference in the surface site area requirements to facilitate the extraction of onshore oil and gas compared to from other forms of mineral extraction.
- The visual impact of hydrocarbon developments taking account of the size of the drilling equipment and well-head structures.
- Factors involved in the choice of location for the surface installations (need to maximise the volume of oil and gas that can be extracted whilst minimising environmental and amenity impacts).
- Potential impacts of noise, dust and vibration during initial drilling and longer-term extraction.
- Potential pollution risks and wider impacts on the water environment.
- Traffic generation.
- Impact on agricultural land take and usage.
- Potential impacts of areas of acknowledged interest (landscape, biodiversity, archaeology and heritage assets).
- Seismic activity.
- Risk of subsidence.
- Risks from drilling through coal measures, particularly through former coal workings.
- Methane leakage.

4.9 The paper also included a list of other factors that would need to be taken into account in developing a strategy for the provision and extraction of hydrocarbons. The list was developed from the issues set out above, together with the experience of the Councils of processing planning applications for mineral development, including coal and hydrocarbons, and the responses of local communities to those proposals. The relevant factors were identified as:

- Government energy policy to secure sufficient supplies of energy to serve the requirements of the country whilst also reducing our carbon footprint and the role of renewable energy production as part of that policy
- The benefits of an indigenous supply compared to a growing reliance on imported sources
- The uncertainty about the future of coal as a means of energy production
- The limited supply of our energy requirements currently met by renewable facilities
- The current support, in principle, of the Government for more energy supplies to be obtained from hydrocarbons
- The known availability of oil and gas resources in the Plan area and the potential for further resources to be discovered
- The limited level of information about the location, scale and economic viability of the hydrocarbon resource in the Plan area
- The likelihood that these questions may be resolved during the Plan period leading to the development of proposals to extract those resources
- The environmental and social impacts of extracting those resources, some of which are well known whilst other potential impacts are less certain
- The likelihood that proposals for exploration and appraisal will be forthcoming during the Plan period
- The potential for new extraction technologies to be developed over the Plan period
- The possible identification of potential areas for hydrocarbon extraction
- The issue of the identification of constraints
- The development of policies, including detailed criteria, which would be used to assess and determine future hydrocarbon extraction applications

- The definition of potential benefits, how they should be assessed and the role to be played in the determination of proposals for new working

4.10 The above matters were used to identify six specific issues and options in relation to hydrocarbon development:

Issue 1: Emerging Approach to the provision of hydrocarbons

- Not seek to identify specific sites for working
- Include a criteria-based policy or policies covering the three phases of hydrocarbon development

4.11 Issue 2: Identification of hydrocarbon resources within the Plan area.

Three options were put forward:

- Option 1: Identify on a plan the information required by new government guidance – that is current Petroleum Exploration Development Licence (PEDL) areas and existing working sites.
- Option 2: In addition to government guidance requirements - identify on a plan the extent of other areas where conventional and unconventional oil and gas resources are known to be present.
- Option 3: In addition to government guidance requirements - identify on a plan the extent of other areas where conventional and unconventional oil and gas resources are known to be present and other areas where geological conditions indicate that further resources of hydrocarbons may be found.

4.12 Issue 3: Identification of constraints on the production and processing of conventional and unconventional hydrocarbons

Two options were put forward:

- Option 1: Identify constraints for current PEDL areas only.
- Option 2: Identify constraints for current PEDL areas and also for those parts of the Plan area where hydrocarbon resources are known to be present.

4.13 Issue 4: The use of criterion-based policies for conventional and unconventional hydrocarbon developments.

- a) The use of separate policies for each stage of hydrocarbon developments
 - Option 1: Include only two separate criteria policies; one for exploration and appraisal and another for production.
 - Option 2: Include separate criteria policies for each of the three stages of development.

 - b) The use of additional criteria policies for oil or gas, for conventional or unconventional sources or for different extraction technologies
 - Option 1: Include only two or three separate criterion-based policies for the three phases of hydrocarbon developments (as determined by the responses to the options above).
 - Option 2: Include a separate set of criterion based policies for the phases of each of the different types of hydrocarbon (e.g. conventional oil and natural gas, gas from coal measures and gas from unconventional sources such as the hydraulic fracturing of shale deposits).
 - Option 3: In addition to Option 1 include only an additional set of criterion-based policies specifically for hydraulic fracturing.
- 4.14 Issue 5: The range of criteria to be included in the policies for conventional and unconventional hydrocarbons.
- 4.15 Issue 6: Criteria to be applied to proposals for the hydraulic fracturing of shale gas.

5. Towards a Minerals Local Plan: Spring 2018 Consultation - Proposed Approach

- 5.1 The Proposed Approach set out the draft Vision and Objectives and overarching strategic sustainability principles which will underpin the Plan, together with the approach to the provision for each of the important minerals found in the Plan area. The paragraphs below set out the outcomes for the proposed approach, in relation to hydrocarbons, in light of previous consultation.. The complete text is set out in the following document:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan: Spring 2018 Consultation: Proposed Approach, December 2017 – Chapter 8.2 Hydrocarbons

- 5.2 More detailed background information about hydrocarbons was updated and set out in the following background Papers:

*Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan: Spring 2018 Consultation: Proposed Approach,
Conventional Oil and Gas Background Paper, December 2017
Unconventional Gas – Gas from Coal Background Paper, December 2017
Unconventional Gas – Shale gas Background Paper, December 2017*

5.3 Representations on the Emerging Approach 2015/2016 Rolling Consultation

The consultation received a larger number of representations compared to some of the other consultation papers but most stated an objection in principle to further oil and gas extraction, particularly the extraction of shale gas by hydraulic fracturing and did not provide responses to the options set out. Representations to the specific issues and options set out in the consultation were very limited, which in turn also limits the conclusions that can be drawn from the consultation exercise. In the absence of representations and also by inference, any opposition to the approach set out in the consultation paper, the new Plan will therefore include an approach to future hydrocarbon mineral extraction in line with national policy and which generally maintains the approach of the existing Mineral Local Plan, amended to address the issues raised by hydraulic fracturing and the use of new extraction techniques. Details of the representations received and a considered response to the comments is set out in the following report:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan: Spring 2018 Consultation – Proposed Approach Report of Representations, December 2017

Duty to Co-operate

- 5.4 Two strategic cross-boundary issues relating to planning for the provision of hydrocarbons have been identified by the Councils:
- The supply of oil and gas from conventional sources; and
 - The supply of oil and gas from unconventional resources.
- 5.5 The distribution of hydrocarbon resources in the UK and the energy needs of the country as a whole represent cross-boundary matters for this Minerals Local Plan and those of neighbouring authorities. The geological fields which underlie the Plan area and which contain hydrocarbon resources also underlie neighbouring counties and beyond, and some of the current PEDL areas straddle the county boundary.
- 5.6 The Councils have, and will continue to engage with all relevant authorities and public bodies over matters relating to the development of a complementary approach to the extraction of hydrocarbons to reflect those linkages, and this has fed into the development of the Proposed Approach, Spring 2018 consultation.
- 5.7 All Duty to Co-operate Issues together with the stakeholders involved have been set out in the following Background Paper which has been updated to add additional matters that have arisen since the Plan has progressed. Further information can be found in the following report.

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan - Spring 2018 Consultation: Proposed Approach
Duty to Cooperate Report - Background and Progress, December 2017

Sustainability Appraisal (SA) of the Rolling Consultation 2015-2017

- 5.8 An SA was undertaken on all the Papers that constituted the Towards a Minerals Local Plan Rolling consultation 2015-2017 and all of the sites (none of which were for hydrocarbon extraction) that were promoted by operators.

- 5.9 The SA noted that, in relation to oil and gas, the approach put forward was in-line with the NPPF and PPG, which ought to lead to neutral effects in the main. Not allocating sites was considered positive with regards to climate change as it does not pre-empt the use of fossil fuels. It noted the obstacles to identifying and allocating sites at present. The draft list of criteria was considered appropriate to ensure that most aspects of environmental sustainability are addressed but suggested the addition of soil resources to the list. A full Appraisal is set out in the following report:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan: Spring 2018 Consultation: Proposed Approach
2nd Interim Sustainability Appraisal (SA) Report, December 2017

- 5.10 Where appropriate the findings of the SA have been incorporated into the Proposed Approach, Spring 2018 consultation. The paragraphs below set out the outcomes for the proposed approach in relation to hydrocarbons issues, in the light of previous consultation.

Outcomes for the Spring 2018 Consultation: Proposed Approach: Hydrocarbons

Vision and Objectives

- 5.11 Chapter 3 of this consultation document contains the Plan's draft Vision and Objectives. The Vision is about what the Plan area will be like in terms of mineral development in 2030 if the policies and proposals of the Plan have been successfully delivered over the Plan period. The Objectives set out the key goals that will need to be attained to make the Vision a reality. The contribution that the individual draft policies set out in the hydrocarbons chapter will make towards achieving the overall draft Vision and Objectives of the Plan, is set out below the Policies section at the end of the chapter.

Issues for developing a proposed approach for Hydrocarbons: Making provision for Hydrocarbons

- 5.12 It is intended that the Plan will adopt an approach to the provision for hydrocarbons in line with national planning policy as expressed in the NPPF and PPG, reflecting the need to provide for a steady and adequate supply of these resources as a mineral of national importance. It will not seek to enumerate the provision as government guidance expects that the volume and mix of energy mineral extraction is a matter for the relevant industries to determine. In addition, the scale of resources available in the Plan area and the commercial viability of those resources are very uncertain, rendering it impossible to set out an appropriate yearly or overall level of production.
- 5.13 In line with national planning policy, the Plan will seek to ensure that developments which do proceed represent sustainable mineral development, and only those that would not give rise to unacceptable adverse impacts would be allowed to proceed. In order to deliver this important objective, the Plan will set out policies to assess the level of acceptability, or otherwise, of individual development proposals. The policies will recognise the three distinct phases of hydrocarbon development; that is exploration, appraisal and production, but the decision on whether this would involve a separate policy for each stage will not be determined until the form and content of the policies is developed further and agreed.

Identification of Hydrocarbon Resources within the Plan Area

- 5.14 The PPG states that the exploratory, appraisal and production phases of hydrocarbon extraction can only take place in areas where the Department of Energy and Climate Change (now Department for Business, Energy & Industrial Strategy) has issued a licence under the Petroleum Act 1998 (Petroleum Licence). The new Minerals Local Plan will identify Petroleum Development Licence Areas (PEDL) and any existing permitted oil and gas extraction sites which are present in the Plan area.
- 5.15 In addition, the PPG also encourages mineral planning authorities to make provision for hydrocarbons by the use of published data on the location of conventional and unconventional hydrocarbons, use of ordnance survey-based policies maps and available data on existing wells. There are practical

limitations concerning the extent to which the new Minerals Local Plan can identify other areas where hydrocarbon extraction may be possible and also potentially acceptable. The limitations for the identification of these resources are similar to those for coal. The level and accuracy of information which is currently available about the location, scale and the economic viability of the remaining hydrocarbon resource is very limited. In the absence of detailed information about an individual site and how the hydrocarbon would be extracted it is difficult to assess the acceptability of working the resource on particular sites.

Identification of Constraints on the Production and Processing of Hydrocarbons

- 5.16 The NPPF² 2012 states that mineral local plans should address the constraints on the production and processing of hydrocarbons within the areas that are licensed for oil and gas exploration or production (paragraph 147).
- 5.17 The limited responses to the consultation did not provide support or opposition to any of the options put forward. In terms of area coverage, it is therefore likely that the Plan will identify constraints, where possible, for all areas where hydrocarbon resources are known to exist and which could potentially be subject to development proposals. It is likely that the Plan will seek to identify those constraints listed in the NPPF and PPG which relate to environmental constraints which are matters within the remit of mineral planning authorities when determining planning applications, together with constraints of a cumulative, social and economic nature.

Use and Range of Criteria Based Policies

- 5.18 Most respondents who commented on the relevant options supported the approach advocated in the NPPF of setting out criteria-based policies to assess and determine planning applications for hydrocarbon based developments. In addition, the NPPF states that planning permission is required for each of the

² MHCLG, NPPF, March 2012

three separate stages of hydrocarbon development; exploration, appraisal and production, and that local plans should include policies for each stage. It does not clarify whether each stage should be covered by separate policies with differing sets of criteria or whether the three phases could be addressed by one all-embracing policy, and the responses to the relevant options were not supportive of any one option more than another. It was noted in the consultation that the range of criteria available to a mineral planning authority is now well established and these are set out in relevant guidance. Most, if not all of these criteria could be relevant to each phase of development. Whilst the form and wording of policies is to be addressed further in this and subsequent consultations, initial indications are that there may be sufficient similarities for one policy covering both exploration and appraisal and a separate policy for production. The policies set out below are examples of how those of the new Plan could appear and the form they could take.

Specific Issues Relating to Hydraulic Fracturing

- 5.19 The consultation exercise considered options for including one criteria policy for all hydrocarbon developments or having a separate, additional policy specifically for hydraulic fracturing. Again the limited number of responses and the contrasting suggestions did not provide definitive support for either option. Whilst the authorities have experience of processing planning applications for oil and gas production from conventional sources, at this point there has been only a limited number of development proposals for hydrocarbons from unconventional sources. However, and on the basis that only those parts of a policy or policies which are relevant to a particular development proposal will be taken into consideration, there is no indication, as yet, that one policy only for hydrocarbons would not enable all the relevant issues of developments from the differing sources or the use of different extraction technologies to be fully examined.

Emerging Policies

- 5.20 As stated above, the approach of the Plan to hydrocarbon development is not yet as advanced as for some other minerals. The consultation responses did not provide the steer that was hoped for but it is important that the approach is

developed as part of this consultation so that progress can be made towards a draft plan. It is acknowledged that national planning policy requires the Plan to include policies setting out the criteria against which mineral development proposals will be determined. The emerging Plan will therefore include such policies for hydrocarbon development, although the number and form of those policies has yet to be agreed.

5.21 In order to stimulate debate and progress this issue, a set of potential policies covering the range of factors that will need to be included in the hydrocarbon policies of the new Minerals Local Plan formed part of this consultation. They were intended to show how the policy requirements for hydrocarbons could appear

5.22 Policy MS17 is concerned about proposals for oil and gas exploration and appraisal. It proposes to allow such proposals where they would meet all of the following criteria:

- Well sites and associated facilities are sited in the least sensitive location from which the target reservoir can be accessed
- It has been demonstrated that possible effects that might arise from the development would not adversely affect the integrity of sites designated or recognised for their landscape, historic heritage or biodiversity interests
- The application demonstrates that there would be no adverse impact on the underlying integrity of the geological structure
- The application provides an indication of the extent of the reservoir and the extent of the area of search within the reservoir
- Exploration and appraisal operations are for an agreed temporary period
- Well sites and associated facilities are restored at the earliest opportunity if oil and gas is not found in economically viable volumes, or they are developed within an agreed time frame.

5.23 An alternative policy was proposed with the same criteria but with a requirement that the applicant can demonstrate that the development would satisfy all of the criteria.

5.24 The consultation also included policy MS18 which concerned proposals for oil and gas production and ancillary development. It proposes to allow such proposals where they would meet all of the following criteria:

- A full appraisal programme for the oil and gas field has been completed to the satisfaction of the Mineral Planning Authority;
- A framework for the full development of the field is submitted for approval by the Mineral Planning Authority;
- Facilities required for hydrocarbon production sit within the agreed development framework, are justified in terms of their number and extent, and are progressively installed wherever possible;
- Extraction, processing, dispatch and transport facilities are sited, designed and operated to minimise environmental and amenity impacts and provide proportionate environmental enhancements;
- Any adverse impacts, both individual and cumulative, can be avoided or mitigated to the satisfaction of the Mineral Planning Authority;
- It has been demonstrated that possible effects that might arise from the development would not adversely affect the integrity of designated and non-designated biodiversity sites, either alone or in combination with other plans or projects;
- It can be demonstrated that there would be no adverse impact on the underlying integrity of the geological structure, including any disturbance to former coal mining shafts and seams that could result in additional adverse impacts from those sources;
- Existing facilities are used for the development of any additional fields discovered unless the applicant satisfies the Mineral Planning Authority that this would not be feasible and any adverse impacts can be mitigated;
- Where a proposal uses existing production facilities, the integrity of the existing infrastructure can be demonstrated, having regard to local environmental factors;
- The development includes the use of pipelines for the transport of the oil or gas unless it is demonstrated that this is not feasible. In such cases rail

or road will be considered but in the case of road it will only be allowed where it has been demonstrated that it would not give rise to unacceptable impacts on the environment or highway safety.

6. Towards a Minerals Local Plan: Winter 2021/2022 Consultation – Proposed Draft Plan

Revised NPPF and NPPG

- 6.1 Since the Spring 2018 consultation was published the government has revised the NPPF and partly revised the PPG. Iterations of the revised NPPF were published in July 2018, February 2019 and July 2021. Significant changes were made to the policy relating to the supply of hydrocarbons. The 2018 revision introduced paragraph 209a which stated that, “ *Mineral Planning Authorities should recognise the benefits of on-shore oil and gas development, including unconventional hydrocarbons, for the security of energy supplies and supporting the transition to a low-carbon economy; and put in place policies to facilitate their exploration and extraction.*”
- 6.2 Following a High Court judgement and ensuing order³, paragraph 209a has been deleted and the NPPF updated and published in July 2021. It now requires that MPAs should, when planning for on-shore oil and gas development, clearly distinguish between and plan positively for, the three phases of development (exploration, appraisal and production), whilst ensuring appropriate monitoring and site restoration is provided for. This is similar to the 2012 NPPF but that iteration also required the MPA to address constraints on production and processing within areas that are licensed for oil and gas exploration or production.
- 6.3 A Written Ministerial Statement on Energy Policy⁴ published in May 2018 specifically stated that shale gas development was of national importance and

³ 2019 EWHC 519 (Admin) dated 6 March 2019 and Order No CO/3511/2018, dated 14 May 2019

⁴ DBEIS Energy Policy WMS May 2018

that MPAs should give great weight to the benefits of its extraction. It added that Mineral Local Plans should reflect that minerals resources can only be worked where they are found, and applications must be assessed on a site by site basis and having regard to their context. Plans should not set restrictions or thresholds across their plan area that limit shale development without proper justification. It was expected that Mineral Planning Authorities recognise the fact that Parliament has set out in statute the relevant definitions of hydrocarbon, natural gas and associated hydraulic fracturing.

- 6.4 In November 2019 the Government issued an update⁵ on shale gas exploration in the light of high levels of induced seismic activity at Cuadrilla's Preston New Road site, Lancashire in 2018 and 2019. It stated that, '*On the basis of the current scientific evidence, the Government has confirmed that it will take a presumption against issuing any further Hydraulic Fracturing Consents. This position, an effective moratorium, will be maintained until compelling new evidence is provided which addresses the concerns around the prediction and management of induced seismicity.*' The Government has since confirmed that whilst the moratorium remains in place there are no plans to turn it into a ban on hydraulic fracturing.⁶ The Councils have therefore revisited the policy approach in the light of new policy and government guidance since the 2018 consultation.
- 6.5 There is also a new requirement in the NPPF in terms of Duty to Co-operate. Planning authorities are required to produce one or more Statements of Common Ground (SOCG) to document the cross-boundary matters being addressed and progress in co-operating to address these matters.
- 6.6 In accordance with the NPPF the Proposed Draft Plan sets out the strategic priorities for the Plan which are encompassed in the draft Vision and Objectives. It includes a framework of strategic policies aimed at addressing those priorities together with non-strategic development management policies aimed at

⁵ DBEIS WMS HCWS68 Energy Policy Update November 2019

⁶ HL Debate, 9th January 2020, Col 301-302

avoiding, minimising and mitigating the adverse impacts of minerals development. The strategic policies set out an overall strategy for the pattern and scale of mineral development and make provision for the supply of minerals (including cross-boundary supplies) over the Plan period. Where appropriate they identify specific sites for working. The paragraphs below set out the outcomes for the proposed draft plan, in the light of previous consultation, in relation to hydrocarbons. The complete text is set out in the following document:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan: Winter 2021/2022 Consultation: Proposed Draft Plan, December 2021 – Chapter 8.2 Hydrocarbons.

- 6.7 More detailed background information about hydrocarbons has been updated and set out in the following documents:

*Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan: Winter 2021/2022 Consultation: Proposed Draft Plan
Conventional Oil and Gas Background Paper, December 2021
Unconventional Gas – Gas from Coal Background Paper, December 2021
Unconventional Gas – Shale gas Background Paper, December 2021*

Representations on the Proposed Approach Spring 2018 Consultation

- 6.8 The hydrocarbons chapter of the spring consultation and the accompanying background papers generated a large number of comments. Several respondents repeated their opposition in principle to all hydrocarbon development including hydraulic fracturing in the Plan area. Reasons cited included:

- Renewables can provide for our energy needs so the gas is not required
- Fracking extends the use of fossil fuels and is not compatible with climate change objectives
- Adverse impact on the environment
- Adverse impact on human health
- Contribution to climate change

- Additional adverse impact in North East Derbyshire which has experienced coal mining in the past and where coal seams remain
- Additional adverse impacts of fracking taking place underneath or near properties

6.9 A large number of comments were received on the issues set out in the proposed approach and on the wording of suggested policy approaches. The consultation included the following issues:

- Provision for Hydrocarbons
- Identification of Hydrocarbon Resources Within the Plan Area
- Identification of Constraints on the Production and Processing of Hydrocarbons
- Use and Range of Criteria Based Policies
- Specific Issues relating to Hydraulic Fracturing

6.10 The two suggested policies included in the consultation were:

MS17 Proposals for Oil and Gas Exploration and Appraisal (two alternatives were put forward for consideration)

MS18 Proposals for Oil and Gas Production and Ancillary Development

6.11 All representations have been considered and taken into account in preparing the Proposed Draft Plan. The section below headed ‘Outcomes for the Proposed Draft Plan’ shows how comments have been taken into account based on issues. Detailed information on the individual representations made can be found in the following document:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan: Winter 2021/2022 Consultation: Proposed Draft Plan - Report of Representations, December 2021

Minerals Local Plan Community Action Group

6.12 The Report of Representations also contains information about a Community Action Group. Residents from the north eastern part of Derbyshire, the location

of the County's only permission for shale gas exploration, were successful in forming a Community Action Group to voice their concerns about hydraulic fracturing and were keen to be involved in developing the hydrocarbon policies of the Minerals Local Plan. The Councils have met with the Group and welcomed their input as representatives of the residents of north east Derbyshire.

Drop- In Sessions, Spring 2018

- 6.13 The Report of Representations also contains details of issues raised at drop-in sessions held by the MPAs in each of the Borough/Districts within the Plan area. All comments received have been considered and where relevant used to inform the Proposed Draft Plan, Winter 2021/2022 consultation. There were many issues raised in relation to hydrocarbon development and particularly to hydraulic fracturing. The issues were mainly raised at sessions in the north east of the county where a planning application had been recently submitted and which was granted on appeal for the exploration of hydrocarbons at Bramley Moor, near Killamarsh. Comments raised have been used to inform the Proposed Draft Plan.

Duty to Co-operate

- 6.14 Local planning authorities and county councils (in two tiers areas) are under a duty to co-operate with each other and with other prescribed bodies on strategic matters which cross administrative boundaries. Joint working is particularly important in identifying whether development needs that cannot be met within a particular plan area could be met elsewhere.
- 6.15 Strategic policy making authorities should collaborate to establish cross border matters which they need to address in their plans and in accordance with the new NPPF produce one or more statements of common ground. These should document the cross-boundary matters being addressed and progress in cooperating to address these matters.

- 6.16 In preparing the Proposed Draft Plan the Councils have revisited the strategic cross-boundary issues relating to planning for the provision of hydrocarbons, the strategic issues previously identified remain relevant:
- The supply of oil and gas from conventional sources; and
 - The supply of oil and gas from unconventional resources.
- 6.17 The Councils have engaged in meetings and discussions with relevant authorities, mineral operators and other stakeholders. Co-operation has focussed on the need to ensure the development of a complementary approach to the extraction of hydrocarbons and to ensure appropriate consultation/monitoring of planning applications particularly where PEDL licence areas straddle the county boundary.
- 6.18 The Councils have produced a Duty to Co-operate Report setting out the background and overview to duty to co-operate issues. In line with the new provisions of the NPPF they have produced a SOCG which sets out the progress made to date on co-operating to address the strategic cross-border duty to co-operate issues. Two issues have been identified in relation to hydrocarbons. Further information can be found in the following document:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan: Winter 2021/2022 Consultation: Proposed Draft Plan - Duty to Co-operate Report: Introduction and Overview, SOCG, December 2021

Sustainability Appraisal (SA) of the Proposed Approach Spring 2018 Consultation

- 6.19 An SA was undertaken on the policies of the Proposed Approach in May 2018. The appraisal was updated to take account of promoted sand and gravel sites which were the subject of consultation in October 2020. The updated appraisal is set out in the following document:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan: Winter 2021/2022 Consultation

3rd Interim Sustainability Appraisal (SA) Report, August 2020

- 6.20 The SA concludes that the approaches put forward for ensuring the supply of hydrocarbons in the 2018 Spring consultation would on the whole achieve minor positive effects when measured against sustainability objectives. The Appraisal recommends that impacts on water quality is explicitly taken into account. Where appropriate the findings of the SA have been incorporated into the Proposed Draft Plan, Winter 2021/2022 consultation.

Sustainability Appraisal of the Proposed Draft Plan Winter 2021/2022 Consultation

- 6.21 An SA was undertaken on the policies of the Proposed Draft Plan December 2021. The appraisal is set out in the following document:

Derbyshire and Derby Minerals Local Plan - Towards a Minerals Local Plan: Winter 2021/2022 Consultation

4th Interim Sustainability Appraisal (SA) Report, January 2022

- 6.22 The SA Report assesses Policy SP17 in Chapter 8.2 against the eight SA objectives/topics. It predicts that there will not be significant negative effects, however it does suggest that the policy should include the impacts of hydraulic fracturing on groundwater. The MPA consider that this matter is adequately covered in the Development Management policies set out at Chapter 11 and particularly Policy DM8.

Outcomes for the Proposed Draft Plan: Hydrocarbons

- 6.23 The Proposed Draft Plan sets out a proposed draft Vision and Objectives and overarching strategic policies which will underpin the Plan, together with proposed draft policies for the provision of each of the important minerals found in the Plan area. The paragraphs below set out the outcomes for the Proposed Draft Plan in relation to hydrocarbons, in the light of previous consultations.

Vision and Objectives

6.24 Chapter 3 of the Winter 2021/2022 consultation contains the Plan's proposed Vision and Objectives. The contribution that the individual draft policies set out in the hydrocarbons chapter will make towards achieving the overall draft Vision and Objectives of the Plan, will be monitored in accordance with the proposed monitoring framework set out at Chapter 12 of the Plan.

Hydrocarbons

6.25 The Spring 2018 consultation included key Issues that needed to be addressed in order to develop a strategy for ensuring the supply of oil and gas and proposed a Policy MS17 concerning oil and gas exploration and appraisal. Two approaches were presented under MS18 relating to oil and gas production. These key issues will be referred to again in explaining the development of the Proposed Draft Plan. A particular feature of the Proposed Draft Plan is the more concise and streamlined approach that has been taken by the MPA as progress is made towards the 'publication/submission' stages of Plan preparation.

Issue: Definitions

6.26 Representations were made on the need to define conventional and un-conventional hydrocarbons and the need to define hydraulic fracturing. Whilst the Plan defines 'conventional and un-conventional hydrocarbons' it does not put forward a different policy approach for their exploration, appraisal and production. The Plan defines 'hydraulic fracturing' but does not put forward a different policy approach where this is included as part of the proposal.

6.27 Hydraulic fracturing is defined in the PPG as '*the process of opening and/or extending existing narrow fractures or creating new ones in gas or oil-bearing rock, which allows gas or oil to flow into wellbores to be captured*⁷'. The MPA considers that this definition encapsulates what the general public understand the term 'hydraulic fracturing' to mean and by using this definition it also includes all volumes of fluid used and all different types of fracturing e.g. acidisation. The government has only imposed 'restrictions' on associated

⁷ PPG Paragraph: 129 Reference ID: 27-129-20140306 Revision date: 06 03 2014

hydraulic fracturing where it meets the statutory definition according to the Infrastructure Act 2015 i.e. based on the volume of fracturing fluid used, reiterated in the November 2019 WMS⁸. These restrictions relate to hydraulic fracturing within ‘protected’ areas⁹ and in relation to the issuing of ‘hydraulic fracturing consents’. They are referred to in paragraph 8.2.43 of the Proposed Draft Plan.

Issue: Making provision for Hydrocarbons

6.28 NPPF July 2021 is the main statement of national policy of relevance to preparing the local plan and at paragraph 210 it states that ‘*planning policies should provide for the extraction of mineral resources of local and national importance*’ Minerals of national and local importance are defined in Annex 2- the Glossary, as minerals which are necessary to meet society’s needs and include oil and gas (including conventional and unconventional hydrocarbons). NPPF paragraph 215 requires the MPA when planning for onshore oil and gas development to clearly distinguish between, and plan positively for, the three phases of hydrocarbon development. Planning Practice Guidance also advises that energy supplies should come from a variety of sources, including onshore oil and gas (ID 27-124-20140306). In planning for hydrocarbons the MPA has to take into account the government’s most recent statements on energy policy¹⁰. In December 2020 the Government published its Energy White Paper¹¹ entitled ‘Powering our Net Zero Future’; in terms of the way in which the UK produces and uses energy, it promotes a decisive shift away from fossil fuels, as far as it is possible to do so, to using clean energy technologies such as renewables, nuclear and hydrogen. Nevertheless, the White Paper anticipates that oil and gas will still form part of the energy mix in 2050 and therefore it is important to plan for their continued supply. A government Written Ministerial Statement (WMS)¹² published in November 2019 stated, “*the Government continues to recognise the importance of natural gas as a source of secure and*

⁸ DBEIS Written Ministerial Statement HCWS68 November 2019, - Energy Policy Update

⁹ The Onshore Hydraulic Fracturing (Protected Areas) Regulations 2016 and the Petroleum Licensing (Exploration and Production) (Landward Areas) (Amendment) (England and Wales) Regulations 2016

¹⁰ DBEIS Written Ministerial Statement HCWS68 November 2019, - Energy Policy Update

¹¹ DBEIS Energy White Paper Powering our Net Zero Future December 2020

¹² DBEIS WMS HCWS68 Energy Policy Update November 2019

affordable energy as we aim to reach net zero emissions by 2050". The WMS sets out that the Committee on Climate Change (CCC) predicts that we will still be consuming about 70% of the gas that we consume today in 2050 under our net zero target as significant reductions across building, industry and power are offset by demand for gas to produce hydrogen and therefore, continued good access to natural gas from both domestic and international markets is seen as critical. In terms of scale of provision there are no national assessments on the need for hydrocarbons. Government guidance is that the volume and mix of energy mineral extraction is a matter for the relevant industries and markets to determine.

- 6.29 One of the tests of soundness is that local plans must be consistent with national policy enabling the delivery of sustainable development in accordance with the policies in the NPPF. In principle therefore the Local Plan has to plan positively and include policies that enable the exploration, appraisal and production of conventional and unconventional hydrocarbons for it to be found sound hence the inclusion of Policy SP17 in the Proposed Draft Plan.

Climate Change

- 6.30 Many representors challenged the compatibility of the continued use of fossil fuels and the impacts on climate change including compatibility with the government's commitment to achieve a target of zero greenhouse gas emissions by 2050. Representations also pointed out the requirements set out in the NPPF which requires the planning system to support the transition to a low carbon future in a changing climate by shaping places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience, encourage the re-use of existing resources, including the conversion of existing buildings and support renewable and low carbon energy and associated infrastructure.
- 6.31 Representors also drew attention to the removal of paragraph 209a from the NPPF which stated that *'Mineral Planning Authorities should recognise the benefits of on-shore oil and gas development, including unconventional hydrocarbons, for the security of energy supplies and supporting the transition*

to a low-carbon economy; and put in place policies to facilitate their exploration and extraction.' The main reason for removal of the paragraph was the government's failure to take into account alternative sources of evidence regarding the level of emissions from unconventional hydrocarbon exploitation. The government has since confirmed its positive policy approach towards the exploitation of onshore oil and gas resources including unconventional shale gas in its November 2019 WMS, including recognition of compatibility with achieving the net zero climate change target. However, it is widely recognised that changes in technology and government policy will be required in order to meet the net zero target and that the expansion of supplies of low carbon power will be needed.

- 6.32 In line with the current NPPF however, as previously referred to, the Plan adopts a positive approach in principle towards hydrocarbon development. The climate change requirements set out in the NPPF are taken into account through a plan wide policy SP2 Climate Change applying to all minerals which seeks mitigation and adaptation measures.

Issue: Identification of Hydrocarbon Resources within the Plan Area

- 6.33 The PPG encourages MPAs to make provision for hydrocarbons by the use of published data on the location of conventional and unconventional hydrocarbons, use of ordnance survey-based policies maps and available data on existing wells. There are practical limitations however concerning the extent to which the Minerals Local Plan can identify areas where hydrocarbon extraction may come forward. The level and accuracy of information which is currently available about the location, scale and the economic viability of the 'hydrocarbon' resource is very limited. What we do know is that limestone and sandstone are sources of conventional oil and gas present in the Plan area. Coal deposits within the Plan area are known to contain unconventional oil and gas resources and recent studies demonstrate that shale bearing gas is present in parts of the Plan area in the form of the Bowland-Hodder shale resource. The Minerals Local Plan will contain maps depicting the broad location of these areas. This shows where important hydrocarbon resources are likely to be located and consequently where any new PEDL licences are likely to be issued.

6.34 The exploration, appraisal and production of hydrocarbons can only take place within a PEDL licence area issued under the Petroleum Act 1988 by the Oil and Gas Authority. The Minerals Local Plan will, therefore, identify PEDL Areas and existing permitted oil and gas extraction sites which are present in the Plan area in accordance with PPG. Representors suggested that resources outside PEDL areas should not be included, however this approach would not depict where new PEDL areas might be located and in any case, the Plan will adopt a plan-wide policy approach to new hydrocarbon development to cover known resource areas and any new areas. In response to a representation the Plan will make it clear that hydrocarbon resources are not subject to safeguarding in the same way that other minerals are.

Issue: Identification of Constraints on the Production and Processing of Hydrocarbons

6.35 The latest edition of the NPPF in July 2021 no longer requires mineral local plans to “*address the constraints on production and processing within areas that are licensed for oil and gas exploration and production*”. The Plan therefore adopts a plan wide criteria policy that will apply in existing PEDL areas and in any future PEDL areas and will therefore cover all geographical areas with potential for hydrocarbon development. Representations were received requesting the exclusion of special designations from PEDL areas and that constraints should be identified in PEDL and known resource areas. In the light of the changes to the NPPF it is the intention of the Plan that constraints to working will be imposed through the implementation of a specific criteria-based policy for extracting hydrocarbons and all other relevant policies of the Plan where they apply. The Proposed Draft Plan includes some 21 Development Management Policies which seek to avoid, control and mitigate the impacts of mineral development including taking into account any constraints to working.

Issue: Use and range of Criteria Based Policies

Number of polices

6.36 The Spring 2018 consultation suggested that the plan include two separate polices, one for oil and gas exploration and appraisal (of which two alternatives

were suggested) and one for production and ancillary development. The representations did not provide a consensus on the number of policies but several suggested that 'hydraulic fracturing' should be covered as a separate issue. The MPA is mindful that many impacts arising from conventional and unconventional hydrocarbons are similar and therefore could be dealt with by one policy. Having considered all relevant matters and representations the MPA consider that a consolidating single policy (SP17) covering the three aspects of hydrocarbon development is the most concise and robust approach but with separate sections for exploration/appraisal and production.

Exploration, Appraisal and Production Phases

- 6.37 The NPPF requires the MPA when planning for onshore oil and gas development to clearly distinguish between, and plan positively for, the three phases of hydrocarbon development. It is important therefore at the exploration and appraisal stages to provide an indication of the target reservoir and the extent of area of search within the target reservoir to assist in evaluating whether the well site is located in least sensitive location. If appraisal leads to a commercial interest in the production of hydrocarbons, a framework for the development of the oil and gas field is required to be provided, including an indication of where the proposal fits within that framework. This information is important in evaluating that the well site/s is/are located in least sensitive locations and enables a strategic approach to be taken to the development of field.

Protected Areas

- 6.38 Government policy, through the Licensing system, restricts 'hydraulic fracturing' in 'protected areas'¹³. These areas do not cover all sites that the MPA consider to be 'areas of acknowledged environmental importance', where a more protectionist approach is required, for example, Registered Historic Parks and Gardens are not included. However, all of these areas are 'designated' and benefit from strong national planning policy protection in their own right and, in

¹³ The Onshore Hydraulic Fracturing (Protected Areas) Regulations 2016 and the Petroleum Licensing (Exploration and Production) (Landward Areas) (Amendment) (England and Wales) Regulations 2016

some cases, protective European and other legislation, not just from hydraulic fracturing but from hydrocarbon and other mineral development. Furthermore in view of the MPAs decision to use the PPG definition of 'hydraulic fracturing' which is wider and not compatible with the 'protected areas' legislation, the MPA consider that the most appropriate way of protecting all 'areas of acknowledged environmental importance' is through the Development Management policies of the Plan which will apply to all mineral development as well as both conventional and unconventional hydrocarbon development. These policies will not only protect the designated site or area but also their wider settings or zones of influence/risk; representations have been made about the need to protect the wider setting of the Peak District National Park.

- 6.39 Several representations were received about protecting locally designated sites and non-designated sites. The Development Management policies will take account of any impacts of hydrocarbon development on such features. A representation was also received about protecting 'green belt' areas from hydrocarbon development. This issue applies to all mineral development and therefore this requirement is covered by the Development Management policies and particularly DM11 Green Belt.

Environmental and Social Impacts

- 6.40 Many of the impacts from hydrocarbon development are ones that would be common to most other mineral development. There are some impacts particular to hydrocarbon development such as visual intrusion caused by the height of the well rig, night time noise and light pollution caused by the need for 24 hour drilling and transport impacts caused by the need to move heavy drilling equipment. However, these impacts are considered to be similar to those of an industrial/aggregates crushed rock quarry where processing facilities are often large scale, operate on a 24-hour basis and involve considerable HGV movements. The MPA consider therefore that these kind of impacts should be assessed under the Development Management policies of the Plan which apply to all mineral development.

6.41 Unlike quarrying, however, the nature of extracting hydrocarbons, and particularly the directional drilling techniques available to operators, means that there is a degree of flexibility in terms of the location of surface development relative to the location of the mineral resource. This flexibility provides some opportunity to locate development away from sensitive receptors and has been embedded in the hydrocarbon policy. It will be for the MPA to determine the adequacy of separation distances based on a site by site assessment of potential impacts and feasible mitigation strategies. Well sites and associated infrastructure are expected to be designed and operated to minimise any environmental, local amenity and health impacts.

Cumulative Impacts

6.42 The majority of the areas that have potential for the presence of hydrocarbon resources lie on the exposed and concealed coalfield areas of Derbyshire. Within these areas, widespread opencast and deep coal mining has taken place in the past and whilst all the mines and opencast sites have now closed, much of the legacy remains despite the progression of comprehensive remediation, restoration and redevelopment. The commercial production of hydrocarbons, particularly unconventional hydrocarbons may lead to the intensive development of the resource area over time as more well pads are developed, more wells are drilled, existing wells re-fractured and other supporting infrastructure built. Such development may lead to cumulative impacts on the environment and local amenity. Development Management Policy DM14 of the Proposed Draft Plan sets out a detailed approach to assessing the cumulative impacts of development. The MPA consider that the application of this policy to proposals for hydrocarbon development will ensure that a consistent approach is undertaken for assessing the cumulative impacts of all minerals. Representations were received on the need to adequately address cumulative impacts and for better cross-referencing in the Plan.

Geological Impacts

6.43 The majority of the areas that have potential for the presence of hydrocarbon resources lie on the exposed and concealed coalfield areas of Derbyshire. Within these areas widespread opencast and deep coal mining has taken place,

although presently there are no active coal mining sites within Derbyshire. A number of representations emphasised the need to take into account the impact of hydraulic fracturing on former coal mining areas. The current moratorium on 'hydraulic fracturing' has arisen as a consequence of high levels of induced seismic activity at Cuadrilla's Preston New Road site in Lancashire relating to the presence of geological faulting. The Proposed Draft Plan Hydrocarbons Policy SP17 ensures that adverse impacts on the geological structure including features of former coal mining or other mining activity are taken into account and that measures are included to avoid induced seismicity.

- 6.44 One representation suggested that we need to safeguard other underground mineral resources from hydrocarbon development. This requirement has been added to the draft hydrocarbon policy and in particular will ensure the protection of deep coal resources.

Production

- 6.45 If commercial quantities of oil and gas are found and a site moves into production, the impact of development is likely to increase; the Plan's proposed draft policy has particular criteria relating to the production stage. A key factor is the need to establish a framework for the development of the oil and gas field to enable a strategic approach to be taken to its exploitation which minimises impacts. The criteria seek to limit the number of new production facilities and to use pipelines to transport oil and gas.

Hydraulic Fracturing

- 6.46 The use of 'Hydraulic Fracturing' generated the most representations with specific concerns relating to environmental, local amenity and health impacts. Some concerns about 'hydraulic fracturing' were related to impacts controlled by other regulatory regimes however many of them have land use implications and have been taken into account in the development of the proposed draft policy. A particular measure put forward by representors was the establishment of a 500 metre 'buffer' zone between hydrocarbon development and local communities to protect local amenity and health.

- 6.47 The imposition of a 'buffer zone' in principle is contrary to the PPG which only supports buffer zones (ground separation distances) where based on a site specific assessment, a certain distance is required between the minerals site and adjacent development. Furthermore, the May 2018 WMS reiterates the requirement that applications should be assessed on a site by site basis and states that plans should not set restrictions or thresholds across their plan area that limit shale gas development without proper justification. In theory an area covered by 'buffer zones' could extend over a substantial part of the PEDL areas, thereby setting restrictions that would limit shale gas development.
- 6.48 The MPA is aware, however, that following high levels of induced seismicity at Cuadrilla's Preston New Road Site the government has introduced a moratorium on issuing Hydraulic Fracturing Consents, explained in the publication of a WMS in November 2019¹⁴. The WMS states that, "*The Government has always been clear that we will take a precautionary approach and only support shale gas exploration if it can be done in a safe and sustainable way, and that we will be led by the science on whether this is indeed possible. It remains our policy to minimise disturbance to those living and working nearby, and to prevent the risk of any damage..... On the basis of the current scientific evidence, the Government has confirmed that it will take a presumption against issuing any further Hydraulic Fracturing Consents.*" It is acknowledged that this restriction applies to Hydraulic Fracturing defined by the Government in the Infrastructure Act 2015 which is based on the volume of the fracture fluid used. However as explained at paragraph 6.16 the Minerals Local Plan defines hydraulic fracturing more widely.
- 6.49 In developing the Proposed Draft Plan the MPA is mindful of the government's precautionary approach to 'hydraulic fracturing' including the need to minimise disturbance to those living or working nearby and prevent risk or damage. However, MPA consider that this 'precautionary approach' is best applied on a site by site basis through the individual policies of the Plan rather than the imposition of a blanket 'buffer zone'. Policy SP17 requires that well sites and

¹⁴ DBEIS Written Ministerial Statement HCWS68 November 2019, - Energy Policy Update

associated infrastructure should be sited in the least sensitive location from which the target reservoir can be accessed. It will be for the operator to demonstrate that the chosen site location is the least sensitive location to access the mineral, through the submission of appropriate evidence.

- 6.50 In assessing the ‘sensitivity’ of the location the MPA will apply the Development Management policies of the Plan and particularly DM1 Local Amenity, Health which requires proposals to demonstrate that there will be no unacceptable impacts to local amenity, health, wellbeing and safety arising as a result of noise, dust, blast vibration and air over pressure, emissions to air, ground contamination, land instability, visual intrusion to adjoining land uses and users, light pollution or transport. Policy DM1 also allows for, where appropriate, the application of separation distances between a development and other land uses including residential development and other sensitive receptors. Policy DM8 Water Management and Flood Risk requires the need for mineral development not to adversely affect surface and groundwater.

Restoration and Financial Guarantees

- 6.51 The proposed draft policy includes measures to ensure the timely restoration of sites which is particularly important where commercial quantities of hydrocarbons are not found. Several representations suggested that financial guarantees should be sought from the developer to ensure restoration takes place. The PPG encourages the use of financial guarantees to cover restoration and aftercare costs only in exceptional circumstances, such circumstances include where a novel approach or technique is to be used which the MPA consider could include hydraulic fracturing. However, if an operator contributes to a mutual funding scheme then it should not be necessary for guarantees to be sought. The proposed draft policy allows for each case to be considered individually.

Hydrocarbon Policy wording

- 6.52 A number of representations were made on the detailed wording of the hydrocarbon policies. The Spring 2018 consultation put separate policies for hydrocarbon exploration and appraisal, and for production and alternative

wording was put forward for the first policy. In the light of representations received and national policy developments since the last consultation the MPA has adopted a revised policy approach both in terms of the number and detailed wording of the proposed draft plan policy.

Issue: Monitoring

- 6.53 The Plan, as set out at in Chapter 3, will contain a number of objectives to be achieved over the Plan period, in order to achieve the Plan's overall Vision. The effectiveness of the Plan's policies and proposals, put in place to meet those objectives, will be monitored so that, if necessary, issues can be identified and addressed through a revision of the Plan's policies, either in whole or part.
- 6.54 Policy SP17 of the Proposed Draft Plan seeks to enable the supply of hydrocarbons throughout the Plan period. The MPA will monitor the supply of hydrocarbons through the proposed monitoring indicators set out at Chapter 12. The MPA will liaise with adjoining authorities to monitor the supply of hydrocarbons particularly where PEDL areas lay cross-border.

7. Spring 2023 Consultation – Pre-submission Draft Plan

NPPF and PPG

- 7.1 Since the last consultation there have been no revisions to the NPPF or PPG in relation to planning for hydrocarbons. The Pre-Submission Draft Plan sets out the strategic priorities for the Plan which are encompassed in the draft vision and objectives. It includes a framework of strategic policies aimed at addressing those priorities together with non-strategic development management policies aimed at avoiding, minimising and mitigating the adverse impacts of minerals development. The strategic policies set out an overall strategy for the pattern and scale of mineral development and make provision for the supply of minerals (including cross-boundary supplies) over the Plan period. Where appropriate they identify specific sites for working. The paragraphs below set out the outcomes for the proposed Pre-Submission Draft Plan, in the light of previous consultation, in relation to conventional and unconventional hydrocarbons. The complete text is set out in the following document:

Derbyshire and Derby Minerals Local Plan (2022-2038) Spring 2023 Consultation: Pre-Submission Draft Plan, January 2023 – Chapter 8.2 Conventional and Unconventional Hydrocarbons and Gas from Coal

- 7.2 More detailed background information about conventional and unconventional oil and gas has been updated and is set out in the following documents:

Derbyshire and Derby Minerals Local Plan (2022-2038) Spring 2023 Consultation: Pre-Submission Draft Plan, January 2023 Background Papers:

Gas from Coal – January 2023

Conventional Oil and Gas – January 2023

Unconventional Oil and Gas – January 2023

Representations on the Winter 2021/2022 Consultation

- 7.3 The MPA received a significant number of comments specifically in relation to the supply of conventional and unconventional oil and gas as well as the use of fossil fuels generally. A particular issue was the inclusion in the Plan of any policies relating to the exploitation and increased use of fossil fuels, including oil and gas, as this was considered contrary to statements made by the International Energy Agency and the International Panel on Climate Change in respect of combatting climate change as well as the key priorities of the Global Climate Change Summit Conference of the Parties, Glasgow 2021 (COP26). Objections suggested that the use of fossil fuels would conflict with the NPPF because it would not meet the definition of sustainable development because it would compromise the ability of future generations to survive. Fossil fuel extraction was also considered contrary to statements made elsewhere in the Proposed Draft plan as well as the proposed climate change policies in the County and City Climate Change strategies. Objections were also made to the Plan including reference to recoverable fossil fuel resources in the Plan area which could potentially be economically recovered during the Plan period.

Need for oil and gas

- 7.4 Objections were received in respect of the continued need for oil and gas supply whilst others consider that continued supply was essential for energy security and reducing energy costs and that it is not national policy to restrict the production of oil and gas in the UK. Particular concern was raised about the need for shale gas to support energy security in the light of the length of time it would take to establish production in the UK and impacts of associated hydraulic fracturing.

Policy Development General Comments

- 7.5 Objectors suggested that separate policies should be included for the extraction of conventional and unconventional hydrocarbons. They also suggested that the Plan should include definitions of conventional, unconventional and hydraulic fracturing.

Hydraulic Fracturing Opposition in Principle

- 7.6 The Plan generated many objections to the inclusion of policies that allow hydraulic fracturing. The reasoning for those objections has been summarised in the list below.

1) In view of the current moratorium on hydraulic fracturing, as set out in the Government's Written Ministerial Statement November 2019, the Plan should not include policies which allow hydraulic fracturing to take place;

2) Renewables can provide for our energy needs so gas is not required;

3) Hydraulic Fracturing extends the use of fossil fuels which is not compatible with climate change objectives;

4) The time taken to bring shale gas into production would not be a quick fix to solve the energy crisis and the amount of gas produced is insignificant compared to the demand.

5) The strength of public opposition against hydraulic fracturing in Derbyshire and elsewhere in the Country.

Hydraulic Fracturing causes adverse impacts on the environment and human health from:

6) HGVs especially on local unsuitable roads;

- 7) Impacts of pipelines used to transport the gas;
- 8) Impacts re volume of water required and treatment of wastewater and ground water contamination from fracturing fluid;
- 9) Vibrations and noise from drilling (24 hours a day) compressors, pumps etc;
- 10) Light Pollution from night-time working affecting people and wildlife;
- 11) Air pollution from ozone, dust and escaped/venting/flaring methane adding to poor air quality and climate change impacts;
- 12) impacts on nature conservation and trees including impacts on water courses/drainage affecting on people and wildlife;
- 13) impacts on landscape character from rural/farming to industrial;
- 14) contrary to openness required by green belt policy;
- 15) impacts of hydraulic fracturing taking place underneath or below properties;
- 16) associated risks of induced seismicity in relation to brick-built buildings and historic environment;
- 17) impacts on previously worked coal mining areas with respect to land stability and release of Radon gas;
- 18) Cumulative impacts of multiple well sites plus additional cumulative impacts in North East Derbyshire which has experienced coal mining in the past and where coal seams are present.
- 19) Inability of regulators to protect local residents.
- 20) Impacts of fugitive methane emissions on climate change.

Hydraulic Fracturing Policy Development Buffer Zone for Sensitive Receptors

- 7.7 Many objections were received suggesting that a buffer zone (both 500m and 750m were suggested) between well sites and sensitive receptors particularly homes. Objectors advised that a precedent had been set for a buffer zone in the North Yorkshire Minerals and Waste Local Plan adopted in April 2022. A buffer zone would provide better mitigation for any impacts associated with hydraulic fracturing and reduce anxiety in terms of associated safety issues.

Hydraulic Fracturing Policy Development Buffer Zone for PDNP and other environmental assets

- 7.8 Objections were received in respect of the need to provide a buffer zone (3.5km and 4.5km were suggested) to protect the PDNP, SSSIs and AONBs from hydraulic fracturing. Objectors advised that a precedent had been set in the North Yorkshire Minerals and Waste Local Plan adopted April 2022.

Hydraulic Fracturing Policy Development Production and Well Pad Density

- 7.9 Objections were received suggesting that there should be a limit on well pad density to avoid the proliferation of wells and associated impacts particularly the industrialisation of the countryside. Objectors advised that a precedent had been set in the North Yorkshire Minerals and Waste Local Plan adopted April 2022.

Hydraulic Fracturing Policy Development Kirklees Metropolitan Council Net Zero Approach to Hydrocarbon Production

- 7.10 Objectors suggested that the Plan should adopt the approach set out in the Kirklees Local Plan adopted February 2019 which requires that proposals for hydrocarbon production should demonstrate that they will have a net zero impact on climate change.

Policy SP17 (SP16 in Pre-Submission Draft Plan) Supply of Conventional and Unconventional Oil and Gas Detailed Comments

- 7.11 Objections were received to the detailed wording of Policy SP17. Many of those objections covered issues that have already been set out above. Other issues included:

- 1) amend to include reference to acceptability only where no viable alternatives exist
- 2) the offsetting of carbon emissions should not be allowed
- 3) definition of 'least sensitive location' required
- 4) non-core activities do not automatically need to be done at the mineral site
- 5) underlying geological structure is not a material planning consideration
- 6) define unacceptable adverse impact
- 7) define restoration principles
- 8) include criteria on emissions and climate change
- 9) Include economic feasibility in relation to non-transport modes

- 10) ensure impacts of HGVs on local roads properly taken into account
- 11) ensure environmental impact of pipelines appropriately considered - may be more environmentally damaging than road transport
- 12) include need for good access to suitable road networks in the policy
- 13) include the need for restoration principles to have regard to historic environment
- 14) include need for operators to have insurance to cover any long-term impacts of hydraulic fracturing
- 15) the policy should rule out underground coal gasification in view of its impact on climate change.

7.12 Details of the representations received, together with considered responses and outcomes for the Spring 2023 Consultation are set out in the following document:

Derbyshire and Derby Minerals Local Plan (2022-2038) Spring 2023 Consultation: Pre-Submission Draft Plan, January 2023 - Report of Representations, January 2023

Drop- In Sessions, Spring 2022

7.13 The MPA held Drop-in sessions at six locations throughout the Plan area where planning officers were present to discuss any issues raised by visitors. Questions and comments were received in respect of Policy SP17 (SP16 in the Pre-Submission Draft Plan) and specifically the issue of hydraulic fracturing at four of the six sessions. The issues raised are summarised below. All of the comments received have been considered and where relevant used to inform the Pre-Submission Draft Plan.

- One visitor to the Buxton drop-in session expressed their support for the need for oil and gas extraction, including hydraulic fracturing, because of the need to ensure security of supply.
- One visitor the Wirksworth drop-in session enquired whether the surrounding area was at risk from shale gas extraction and hydraulic fracturing.

- Visitors to the Bolsover drop-in session focussed on the policy relating to conventional and unconventional oil and gas development. Issues raised included whether the effects of meteorological conditions on vented gases, the impacts to local communities associated with emissions to air, noise and dust had been taken into account during the drafting of the policy. The suitability of the local highway networks to accommodate increased HGV traffic, the lack of a 500 metre standoff zone from hydraulic fracturing sites and the need to assess cumulative impacts were also raised.
- One visitor to the Chesterfield drop-in session supported the need to move away from fossil fuels and expressed concern about hydraulic fracturing.

A note of the Drop-in sessions can be found in this document:

Derby and Derbyshire Minerals Local Plan: Towards a Minerals Local Plan - Proposed Draft Plan - Winter 2021/2022 Consultation, Report of Publicity and Consultation, July 2022

Sustainability Appraisal of the Pre-Submission Draft Plan Spring 2023 Consultation

- 7.14 A SA was undertaken on the policies of the Pre-Submission Draft Plan. The appraisal is set out in the following document:

Derbyshire and Derby Minerals Local Plan (2022-2038) - Spring 2023 Consultation: Sustainability Appraisal - SA Report, January 2023

- 7.15 The SA Report assesses Policy SP16 against the eight SA objectives/topics. It notes that, Policy SP16 seeks to ensure that proposals for the exploration, appraisal and production of oil and gas reserves are sited in the least sensitive locations, do not have adverse effects on the geological structure of the land, measures are taken to avoid seepage pollution, operations are temporary and sites are restored at the earliest opportunity. Positive effects are likely for

environmental and social factors, as the policy should help steer exploration activities and subsequent operations away from the most sensitive locations (particularly where they involve hydraulic fracturing and are within 500m to sensitive receptors) and ensure prompt restoration of sites following exploration activities which should reduce the scale and duration of effects. This includes potentially securing a financial restoration bond to ensure restoration where production is proposed. This is particularly positive for biodiversity (SA Topic 1 biodiversity, Flora and Fauna) and landscape (SA Topic 4 Heritage and Landscape), which are most sensitive to exploitation, appraisal and production activities and would benefit substantially from restoration. In the absence of such a policy, there would be less direction and so negative effects may be more likely to arise. Requirements for activities to identify the extent of the target reservoir and search areas should help ensure proposals seek to utilise potential mineral resources (SA Topic 3 Waste and Minerals) and make efficient use of land resources (SA Topic 2 Land and Water Resources).

- 7.16 The policies do not encourage the development of fossil fuel extraction but provide a framework for exploration activities and developments (which can reasonably come forward under the PEDL areas). Therefore, neutral effects are predicted with regards to climate change emissions (SA Topic 6 Climatic Factors and Energy). However, a positive effect is predicted for the supply of minerals and energy (SA Topics 3 and 6), as the policies support the local exploration and extraction of oil and gas resources, potentially reducing the existing reliance on imports and improving the security of the national and local energy supply. Reduced reliance on international imports and requirements for the use of pipelines for the transportation of the oil and gas should also contribute to a minor positive effect with regards to air quality and transport (SA Topic 5). Most oil and gas is imported through pipelines from the EU and transported through pipelines across the country. However, some resources are imported through cargo from mainly OPEC countries and it is predicted that an increased indigenous supply should reduce the associated air pollution / emissions.
- 7.17 The growth of oil and gas extraction operations in Derbyshire should generate new employment in areas likely to have concentrations of deprived

communities. However, whilst this is positive, the effects are not directly attributable to the policies, but rather market forces. Therefore, neutral effects are predicted for SA Topic 8 Local Employment and Housing. In terms of SA Topic 3 Land and water resources the policy requires proposals to not have any adverse effect on the geological structure of sites, which is positive for land. However, in some instances the extraction process may involve hydraulic fracturing which can potentially have detrimental effects on groundwater. The issue of water quality is not explicitly identified in the policy. Developments would need to obtain an environmental permit and health and safety factors in any case (which will cover water quality issue), but it would be beneficial to refer to these important factors in this policy.

- 7.18 In general terms the SA concludes that the changes made between the proposed draft Plan and Pre-Submission Plan have not resulted in any additional negative effects. In some instances, additional positive effects have arisen. As such, no additional recommendations have been made at this latest stage of the SA.

Habitats Regulations Assessment (HRA) of the Pre-submission Draft Plan Spring 2023 Consultation

- 7.19 HRA is required to ensure that the policies of the Plan would not cause a likely significant effect on any European sites. A HRA was undertaken on the policies of the Pre-Submission Draft Plan which concluded that Policy SP16, would have no likely significant effects on European designated sites. It further commented that whilst individual proposals may or may not pose likely significant effects on European sites, but that these would be assessed as part of the scrutiny process when any applications are made. The Assessment is set out in the following document:

Derbyshire and Derby Minerals Local Plan (2022-2038) - Spring 2023 Consultation: Habitats Regulations Assessment, January 2023

Strategic Flood Risk Assessment

- 7.20 A Strategic Flood Risk Assessment has been undertaken on the Pre-submission Draft Plan. The full text can be found in the following document:

Derbyshire Level 1 Minerals Strategic Flood Risk Assessment Update (February 2023)

- 7.21 The SFRA did not identify any issues associated with Policy SP16.

Actions/Considerations

- 7.22 None

Outcome for the Pre-submission Draft Plan

- 7.23 None

Health Impact Assessment

- 7.24 A Health Impact Assessment has been undertaken on the Pre-submission Draft Plan. The full text can be found in the following document:

Derbyshire and Derby Minerals Plan 2022-2038: Health Impact Assessment January 2023

- 7.25 The HIA raised no specific concerns regarding Policy SP16. It notes that, in the light of widespread public concerns about the technique of hydraulic fracturing to exploit oil and gas, the Plan has adopted a precautionary approach to this method of exploitation and has introduced the concept of a 500-metre separation distance between oil and gas sites and sensitive receptors such as houses in Policy SP16. This approach should assist in mitigating anxiety around hydraulic fracturing.

Actions/Considerations

- 7.26 None

Outcome for the Pre-submission Draft Plan

- 7.27 None

Equality Impact Assessment (EqIA) of the Pre-submission Draft Plan Spring 2023 Consultation

- 7.28 An EqIA was undertaken on the policies of the Pre-Submission Draft Plan. The appraisal is set out in the following document:
Derbyshire and Derby Minerals Local Plan 2022-2038: Equality Impact Analysis (January 2023)
- 7.29 With regard to Policy SP16 the EqIA concluded that it would result in a high negative impact to all the protected characteristics groups. It further commented that hydraulic fracturing raised concerns by the public and that impacts would be greater in areas of poor mental health and well-being. The inclusion of a 500-metre separation zone for sensitive receptors should result in positive effects.

Outcomes for the Pre-submission Draft Plan: Chapter 8.2 Hydrocarbons

- 7.30 The Pre-Submission Draft Plan, at Chapter 3, sets out its strategic priorities in the draft vision and objectives and includes strategic policies to address those priorities including ensuring the supply of each of the important minerals found in the Plan area. The paragraphs below set out the outcomes for the Pre-Submission Draft Plan in relation to issues surrounding the supply of conventional and unconventional hydrocarbons. The Plan has been updated and refined as plan preparation has progressed taking into account changes to national planning policy and other strategies, representations received, duty to co-operate requirements and Plan assessments and appraisals.
- 7.31 The Pre-Submission Draft Plan has been streamlined in order to present the Plan that the Councils consider should be taken forward for submission to the Planning Inspectorate for public examination before final adoption. Chapter 8.2 contains an Introduction and Background section, the Policies followed by the Reasoned Justification which incorporates national policy, need and supply. The Chapter includes one policy SP16 aimed at ensuring the supply of

conventional and unconventional oil and gas. The contribution that this policy will make towards achieving the overall draft Vision and Objectives of the Plan, will be monitored in accordance with the proposed monitoring framework set out at Chapter 11 of the Plan

Issue: The supply of and need for Oil and Gas

- 7.32 In terms of supply there is no change in principle from the approach set out in the Proposed Draft Plan Winter 2021/2022 Consultation. The NPPF, at paragraph 210, states that '*Planning policies should provide for the extraction of mineral resources of local and national importance*'. Minerals of national and local importance are defined in Annex 2- the Glossary of the NPPF, as minerals which are necessary to meet society's needs and include oil and gas (including conventional and unconventional hydrocarbons). Planning Practice Guidance also advises that energy supplies should come from a variety of sources, including onshore oil and gas (ID 27-124-20140306).
- 7.33 In planning for hydrocarbons the MPA has to take into account the Government's most recent statements on energy policy. In December 2020 the the Government published its energy white paper¹⁵ entitled Powering our Net Zero Future; in terms of the way in which we produce and use energy it promotes a decisive shift away from fossil fuels, as far as it is possible to do so, to using clean energy technologies such as renewables, nuclear and hydrogen. Nevertheless, the paper anticipates that oil and gas will still form part of the energy mix in 2050 and therefore it is important to plan for their continued supply.
- 7.34 In April 2021 the Government published its Energy Security Strategy¹⁶ setting out targets for renewables, nuclear and low carbon energy sources whilst stressing the importance of 'home grown' sources of energy to reduce our reliance on imports. Oil and gas is recognised as essential transition fuel to

¹⁵ DBEIS Energy White Paper Powering our Net Zero Future December 2020

¹⁶ DBEIS and PM Office Policy Paper British Energy Security Strategy 7 April 2022

reaching 'Net Zero' and an increase in domestic production is supported. One of the tests of 'soundness' is that local plans must be consistent with national policy enabling the delivery of sustainable development in accordance with the policies in the NPPF. In principle therefore the Local Plan has to plan positively and include policies that enable the exploration, appraisal and production of conventional and unconventional hydrocarbons for it to be found sound hence the inclusion of Policy SP16 in the Pre-Submission Draft Plan. Whilst many objections were received to the exploitation of oil and gas in principle and questioning the continued need for oil and gas, the MPA consider the need to include a Policy in the Plan which enables their exploitation to be justified and consistent with the NPPF.

Issue: The principle of using Hydraulic Fracturing to extract oil and gas

- 7.35 The use of hydraulic fracturing generated significant representations with specific concerns relating to the need for shale gas and environmental, local amenity and health impacts. The need to include a policy to enable the exploitation of oil and gas is set out above. The policy will need to allow for the possibility of proposals coming forward for their exploitation through a variety of techniques, including hydraulic fracturing, because the NPPF does not preclude any techniques from being used to access oil and gas resources. For hydraulic fracturing the Government has only issued a moratorium on issuing hydraulic fracturing consents which could be lifted in the future should compelling new scientific evidence present itself which would allow hydraulic fracturing to take place with appropriate environmental safeguards. Whilst this appears to be unlikely, especially having regard to the British Geological Survey report¹⁷, it is important that the Plan includes policies to assess proposals for the exploitation of oil and gas by hydraulic fracturing should they come forward. There is no change in principle from the Proposed Draft Plan Winter 2021/2022 Consultation in that the Pre-Submission Draft Plan includes Policy SP16 which allows for hydraulic fracturing to take place. However, the policy has been

¹⁷ BGS Recent Scientific advances in the understanding of induced seismicity from hydraulic fracturing of shales OR/22/050 ,2022

amended to include a precautionary approach to proposals which include hydraulic fracturing (further details are discussed below).

Issue: Definitions

- 7.36 Representations were made on the need to define conventional and un-conventional hydrocarbons and hydraulic fracturing. The Proposed Draft Plan Winter 2021/2022 Consultation defined conventional and un-conventional hydrocarbons and these definitions are maintained in the Pre-Submission Draft Plan. Changes have been made to make more explicit the definition of 'hydraulic fracturing' and in a change to Policy SP17 (now SP16) a different policy approach is put forward where hydraulic fracturing is included as part of the proposal.
- 7.37 Hydraulic fracturing is defined in the PPG as '*the process of opening and/or extending existing narrow fractures or creating new ones in gas or oil-bearing rock, which allows gas or oil to flow into wellbores to be captured*'¹⁸. The MPA considers that this definition encapsulates what the general public understand the term 'hydraulic fracturing' to mean and by using this definition it also includes all volumes of fluid and pressures used and all different types of fracturing e.g., acidisation. In adopting the wider PPG definition, rather than the 2015 Infrastructure Act definition (linked to volume) which applies specifically to the PEDL and hydraulic fracturing consent regimes the MPA through the application of Policy SP16 will take into account the fact that hydraulic fracturing using lesser volumes and pressures of fracturing fluid may result in a more limited scale of impacts and therefore the overall scale of such impacts will be considered on a site-by-site basis.

Issue: Identification of Hydrocarbon Resources within the Plan Area

- 7.38 The approach to the identification of potential hydrocarbon resources within the Plan area generated a significant number of objections mainly because objectors were against the extraction of fossil fuels in principle. In terms of

¹⁸ PPG Paragraph: 129 Reference ID: 27-129-20140306 Revision date: 06 03 2014

identifying potential hydrocarbon resources supply there is no change from the approach set out in the Proposed Draft Plan Winter 2021/2022 Consultation. In accordance with the NPPF the Plan is required to include planning policies that provide for the extraction of mineral resources of local and national importance. Oil and gas (conventional and unconventional) are included in its definition of such resources. It is appropriate therefore that where such resources are present in the Plan area they are identified.

- 7.39 Information about the scale and the economic viability of the ‘hydrocarbon’ resource remains very limited. Limestone and sandstone are known sources of conventional oil and gas present in the Plan area whilst coal deposits are known to contain unconventional oil and gas resources. Shale bearing gas is known to be present in the form of the Bowland-Hodder shale resource. The Pre-Submission Draft Plan contains maps depicting the broad location of these areas. This shows where important hydrocarbon resources are likely to be located and consequently where any new PEDL licences are likely to be issued. The exploration, appraisal and production of hydrocarbons can only take place within a PEDL licence area. The Pre-Submission Draft Plan identifies PEDL areas on the accompanying Policies Map as required by the PPG.

Issue: The number of hydrocarbon policies

- 7.40 Representations were made on the need to have separate policies for the extraction of conventional and un-conventional hydrocarbons . The Pre-submission Draft Plan maintains its approach of having a single policy for hydrocarbon exploitation because the MPA consider that the impacts of their exploitation are similar in character. A single policy (SP16) covering the three aspects of hydrocarbon development is considered to be the most concise and robust approach but with separate sections for exploration/appraisal and production.

Issue: Policy SP16 The supply of unconventional and conventional oil and gas - policy development

- 7.41 A significant number of objections were made relating to the scope and use of criteria that should be contained in Policy SP16 (SP17 in the Proposed Draft Plan Winter 2021/2022 Consultation).

Exploration, Appraisal and Production Phases

- 7.42 The NPPF requires the MPA when planning for onshore oil and gas development to clearly distinguish between, and plan positively for, the three phases of hydrocarbon development. Policy SP16 includes six criterion that apply to the exploration and appraisal stages and an additional six criteria to the production stage. Criterion one requires proposals to provide an indication of the target reservoir within the PEDL area and the extent of area of search within the target reservoir (informed by exploration stage results where the proposals is for appraisal). The MPA consider that this information is important to assist in evaluating whether the well site is located in least sensitive location as required by criterion two having regard to geological, technical and environmental considerations. Unlike quarrying the nature of extracting hydrocarbons, and particularly the directional drilling techniques available to operators, means that there is a degree of flexibility in terms of the location of surface development relative to the location of the mineral resource. This flexibility provides some opportunity to locate development away from sensitive receptors.
- 7.43 If appraisal leads to a commercial interest in the production of hydrocarbons, a framework for the development of the oil and gas reservoir is required to be provided under criterion eight, including an indication of where the proposal fits within that framework. This information is important in evaluating that the well site/s is/are located in least sensitive locations and enables a strategic approach to be taken to the development of reservoir. Objectors suggested that the Policy should set a limit on the density of well pads to avoid unacceptable environmental impacts however the MPA consider that this matter should be considered on a site by site basis and that it is adequately dealt with under criterion nine which requires that, *The number of well sites and associated infrastructure required for hydrocarbon production sit within the development*

framework, are justified in terms of their number and extent and are progressively installed, wherever possible.

- 7.44 In assessing the 'sensitivity' of the location the MPA will apply the Development Management policies of the Plan and particularly DM1 Local Amenity, Health which requires proposals to demonstrate that there will be no unacceptable impacts to local amenity, health, wellbeing and safety arising as a result of noise, dust, blast vibration and air over pressure, emissions to air, ground contamination, land instability, visual intrusion to adjoining land uses and users, light pollution or transport. Policy DM1 also allows for, where appropriate, the application of separation distances between a development and other land uses including residential development and other sensitive receptors.

Geological Impacts

- 7.45 The majority of the areas that have potential for the presence of hydrocarbon resources lie on the exposed and concealed coalfield areas of Derbyshire. Within these areas widespread opencast and deep coal mining has taken place, although presently there are no active coal mining sites within Derbyshire. A number of objections emphasised the need to take into account the impact of oil and gas exploitation in former coal mining areas and particularly where hydraulic fracturing is involved. Policy SP16 through criterion three seeks to prevent unacceptable adverse impacts on the underlying geological structure and requires proposals to include measures to avoid induced seismicity. The phrase 'that may cause the instability of land' has been added to an objection that seismicity is not a land use planning matter.

Impacts from waste materials

- 7.46 Hydrocarbon development can generate waste material which includes drill cuttings i.e. waste rock from the drilling process, waste liquids from the discarded fluids used to help the drilling process, known as drilling muds, and the waste water that returns to the surface after hydraulic fracturing, known as flowback fluid which can include NORM and other contaminants. Waste water will normally be treated off site. Waste gas should be captured and used wherever practicable or disposed of safely. Unplanned releases of gases

through leakage should be monitored and strictly controlled. A number of objections emphasised the need to address waste materials particularly where hydraulic fracturing is involved. Changes have been made to Pre-Submission Draft Plan through SP16 criterion four to ensure that proposals include satisfactory measures to ensure the control and management of any waste materials arising from the development.

Environmental and Social Impacts

- 7.47 Many objections were received in relation to the environmental and social impacts of oil and gas exploitation particularly where hydraulic fracturing is proposed. The MPA consider that the approach taken at the Proposed Draft Plan Winter Consultation 2021/2022 stage remains valid in that many of the impacts from hydrocarbon development are ones that would be common to most other mineral development. There are some impacts particular to hydrocarbon development such as visual intrusion caused by the height of the well rig, night time noise and light pollution caused by the need for 24 hour drilling and transport impacts caused by the need to move heavy drilling equipment. However, these impacts are considered to be similar to those of an industrial/aggregates crushed rock quarry where processing facilities are often large scale, operate on a 24-hour basis and involve considerable HGV movements. The MPA consider therefore that these kinds of impacts should be assessed under the Development Management policies of the Plan which will apply to all mineral development. An exception is at the production stage of oil and gas where non road modes of transport and particularly pipelines or rail should be used unless it can be demonstrated that this is not practicable or environmentally preferable and this is set out at criterion 10 of Policy SP16.

Cumulative Impacts

- 7.48 The majority of the areas that have potential for the exploitation of hydrocarbon resources lie in the former coal mining areas of Derbyshire. Widespread opencast and deep coal mining has taken place in the past and whilst all the mines and opencast sites have now closed, much of the legacy remains despite the progression of comprehensive remediation, restoration and redevelopment. The commercial production of hydrocarbons in these areas may lead to the

intensive development of the resource resulting in cumulative impacts on the environment and local amenity. Development Management Policy DM14 of the Proposed Draft Plan sets out a detailed approach to assessing the cumulative impacts of development. The MPA consider that the application of this policy to proposals for hydrocarbon development will ensure that a consistent approach is undertaken for assessing the cumulative impacts of all minerals.

Hydraulic Fracturing

- 7.49 The use of 'Hydraulic Fracturing' to exploit oil and gas generated the most representations with specific concerns relating to environmental, local amenity and health impacts. A particular measure put forward by objectors was the establishment of a 500 metre 'buffer' zone between hydrocarbon development and local communities to protect local amenity and health. Since the last consultation on the Minerals Local Plan there has been updated evidence in relation to the issue of buffer zones and hydraulic fracturing. The issue of a '500 metre separation zone' between sensitive receptors, such as residences, and well sites was comprehensively debated at the North Yorkshire Minerals and Waste Local Plan Examination in Public. The Inspectors Report published in February 2022 supported the principle of a '500 metre separation zone'. The Plan which was subject to modifications was adopted in April 2022 and includes under Policy M17 reference to a 500-metre separation zone.
- 7.50 Since the last consultation on the Minerals Local Plan there have been two Written Ministerial Statements, one lifting the moratorium on hydraulic fracturing consents and the latter reinstating it. The most recent WMS in October 2022, stated that, The Government is reverting to a precautionary approach to hydraulic fracturing and will only support shale gas exploration if it can be done in a way that is sustainable and protects local communities. It will be led by the evidence on whether this form of exploration can be done in a way which acceptably manages the risk to local communities. The WMS made reference to the British Geological Survey report on 'the scientific advances in hydraulic fracturing since 2019' which concludes that forecasting the occurrence of large earthquakes and their expected magnitude owing to shale gas extraction remains a challenge with significant uncertainty.

7.51 In the light of this new evidence the MPA has adopted a precautionary approach in the Plan towards the exploitation of hydrocarbons using hydraulic fracturing and introduced the principle of a 500-metre separation distance between sensitive receptors and well sites. Policy SP17 (now SP16) has been changed to include a specific section on 'hydraulic fracturing' which explicitly requires proposals involving hydraulic fracturing to include separation distances. It adds, *'Where the distance proposed from a well site and associated infrastructure to sensitive receptors is 500 metres or less, proposals will not be supported unless, following a robust assessment of the adequacy of the proposed separation distances and taking account of any proposed mitigation measures, it can be demonstrated that there would be no unacceptable impacts on the local amenity, health, well-being and safety of the sensitive receptors.'*

Restoration and Financial Guarantees

7.52 Policy SP17 (now SP16) remains unchanged in terms of seeking financial guarantees where novel or new techniques for exploiting oil and gas are used such as hydraulic fracturing to ensure the restoration of the site in a condition for a suitable after-use.

Coal Gasification

7.53 Policy SP17 (now SP16) has been amended to reflect the Government's withdrawal of support for Coal Gasification due to its incompatibility with climate change objectives for a low carbon future. The Pre-Submission Draft Plan adopts the approach of not supporting proposals for the exploitation of unconventional oil and gas resources involving underground coal gasification.

Protected Areas

7.54 A significant number of objections were received in respect of the need to provide a buffer zone (3.5km and 4.5km were suggested) to protect the PDNP, SSSIs and AONBs from hydraulic fracturing. Objectors advised that a precedent had been set in the adopted North Yorkshire Minerals and Waste Local Plan. For the purposes of protecting important environmental assets from

shale gas exploitation, restrictions have been established in national legislation and implemented through the PEDL and hydraulic fracturing consent regimes for associated¹⁹ and relevant²⁰ hydraulic fracturing. These definitions refer to hydraulic fracturing which involves the injection of—more than 1,000 cubic metres of fluid at any stage, or expected stage, of the hydraulic fracturing, or more than 10,000 cubic metres of fluid in total.

7.55 Regulations ensure, via the hydraulic fracturing consent regime that ‘associated hydraulic fracturing’ cannot take place within 1,200 metres beneath the surface of ‘protected groundwater source areas’ and other ‘protected areas’. Protected areas include National Parks, AONBs, the Broads and World Heritage Sites. Regulations amend model clauses on new PEDLs to prohibit ‘relevant hydraulic fracturing’ operations from taking place from new or existing wells drilled at the surface in the protected groundwater and protected areas as set out above. The surface restrictions also apply to Sites of Special Scientific Interest, Ramsar sites and European sites (as defined by regulation 8(1) of the Conservation of Habitats and Species Regulations 2010, including Natura 2000 sites protected under the Habitats Directive and sites protected under the Wild Birds Directive. For existing PEDLS the Department of Energy and Climate Change (DECC) issued a policy statement which states that save in wholly exceptional circumstances Hydraulic Fracturing Consent will not be granted in protected areas.

7.56 The MPA consider that these designated areas benefit from strong national planning policy protection in their own right and, some cases, protective

¹⁹ As defined in the Infrastructure Act 2015 (1) “Associated hydraulic fracturing” means hydraulic fracturing of shale or strata encased in shale which—(a) is carried out in connection with the use of the relevant well to search or bore for or get petroleum, and (b) involves, or is expected to involve, the injection of—(i) more than 1,000 cubic metres of fluid at each stage, or expected stage, of the hydraulic fracturing, or (ii) more than 10,000 cubic metres of fluid in total.

²⁰ ¹³² As defined in the Petroleum Licensing (Exploration and Production) (Landward Areas) (Amendment) (England and Wales) Regulations 2016 “Relevant Hydraulic Fracturing” means hydraulic fracturing of shale or strata encased in shale which is carried out in connection with the use of a Well to search or bore for or get petroleum, and involves, or is expected to involve, the injection of—more than 1,000 cubic metres of fluid at any stage, or expected stage, of the hydraulic fracturing, or more than 10,000 cubic metres of fluid in total.”.

European and other legislation, not just from hydraulic fracturing but from hydrocarbon and other mineral development. The MPA consider that the approach set out in the Proposed Draft Minerals Local Plan Winter 2021/2022 Consultation should not be changed. Designated areas will be protected from the adverse impacts of hydrocarbon development, specifically through the application of Policy SP16 and the detailed Development Management Policies set out at Chapter 11, including any impacts on their wider settings or zones of influence/risk.

Issue: Policy SP16 The supply of unconventional and conventional oil and gas - Kirklees Metropolitan Borough Council Net Zero Approach

- 7.57 A significant number of objectors suggested that the Plan should adopt the commitment contained within the Kirklees Local Plan adopted February 2019 which states at Policy LP42 that, *‘Proposals for the production of hydrocarbons will be considered against the following criteria: h) Where a proposal demonstrates that it will have a net zero impact on climate change.’*
- 7.58 The MPA recognise the importance of the need to urgently address the issue of climate change and particularly the need to reduce greenhouse gas emissions from mineral development. The MPA considers that mineral development should reduce emissions in line with national and local carbon targets with the goal of achieving net zero emissions by 2050. The MPA consider that it is important that emissions from all mineral development not just hydrocarbon development is effectively addressed. The Pre-Submission Draft Plan, therefore, does not follow the approach of the adopted Kirklees Plan. However, Policy SP2 Climate Change has been amended to require proposals to demonstrate a reduction in greenhouse gas emissions, including fugitive emissions over the lifetime of the development in line with national and local greenhouse gas targets. Additionally, SP2 requires proposals to be accompanied by a climate change impact assessment setting out how measures to reduce emissions and adapt to climate change have been considered, incorporated and will be monitored and reported.

7.59 The Assessment is also required to include an assessment of whether there is a causal connection between the proposal and any impact on the environment associated with any indirect emissions and, whether this constitutes a significant indirect effect of the proposed development. Where this is the case, the indirect emissions will need to be taken into account under Policy SP2.

Issue: Monitoring

7.60 The Plan, as set out at in Chapter 3, will contain a number of objectives to be achieved over the Plan period, in order to achieve the Plan's overall Vision. The effectiveness of the Plan's policies and proposals, put in place to meet those objectives, will be monitored so that, if necessary, issues can be identified and addressed through a revision of the Plan's policies, either in whole or part.

7.61 Policy SP16 of the Pre-submission Draft Plan seeks to enable the supply of hydrocarbons throughout the Plan period. The MPA will monitor the supply of hydrocarbons through the proposed monitoring indicators set out at Chapter 12. The MPA will liaise with adjoining authorities to monitor the supply of hydrocarbons particularly where PEDL areas lay cross-border. There are no changes to the monitoring indicators from the Proposed Draft Plan Winter 2021/2022 Consultation.