Additional Hearings 24 and 25 January 2019

Matter: Unconventional Oil and Gas

Question 4

500m Buffer Zone

4. Whether the 500m zone in Policy M17 4) i) as modified is properly justified and consistent with the WMS. If not, could a smaller zone be properly justified or should any stand-offs be determined on a site by site basis at the application stage? What is meant by "a high level of protection" in the proposed schedule of modifications or the alternative wording "protect local communities", which is now being suggested? How does this differ from the level of protection the industry would be required to demonstrate in any event?

Policy M17 4) i) does not prevent hydrocarbons development from taking place within 500m of residential property or other sensitive receptors, provided that unacceptable impacts can be avoided. The Authorities intended approach to taking decisions under this Policy is clarified in the supporting text of the MWJP (para. 5.146), as proposed to be modified, which states: The adequacy of separation distances to properties or other receptors will need to be determined by the Mineral Planning Authority on a case by case basis but in all cases a rigorous assessment of potential impacts is required and effective mitigation provided where necessary. The Authorities consider that the term 'case by case' is directly consistent with the WMS2018 reference to the need for assessment of applications on a 'site by site' basis. By following this approach the Policy contains flexibility to respond to the local context of the site and to the specific range and scale of impacts expected as a result of the development proposed in any particular case. The 500m distance referenced in the Policy does not represent an arbitrary restriction or threshold limiting development, as it would only have the effect of precluding development which could give rise to unacceptable impacts on local communities. However, as explained further below, it is considered important for this policy, which is designed to protect amenity, to indicate to applicants that development is unlikely to be acceptable within a certain distance of relevant receptors. This does not preclude development within this distance, but it signals to developers the view of the Authorities, that permission is not likely to be granted unless site specific circumstances show otherwise. Prevention of unacceptable impact on local communities is a legitimate and important general planning objective, consistent with national policy (eg NPPF para. 123). For the purposes of applying the separation distance included in MWJP Policy M17 4) i) the scope of local communities is clarified as residential buildings and other sensitive receptors, with further clarification provided in the supporting text at MWJP Para. 5.146.

Retention of reference in the Policy to maintenance of an adequate separation distance is considered important in the context of the circumstances applying to

hydrocarbons development generally and to unconventional hydrocarbons development in particular. As is already referenced in the text of the Plan (eg Para. 5.124) these forms of development typically involve significant phases of night time operations (including activities with particular potential for generation of noise and vibration). They also require a relatively high degree of lighting in order to ensure that health and safety standards can be met. Drilling and hydraulic fracturing stages of activity require relatively tall structures, or lower structures with substantial massing for screening purposes, with corresponding potential for visual impact. The Authorities have repeatedly made reference, during the course of the Examination in Public, to the very early stage of progress of unconventional hydrocarbons development (particularly shale gas) in the UK, and to the corresponding justification, in their view, for a cautious approach to planning for these forms of development, given prevailing uncertainty about the way in which a UK development model may evolve and the specific nature and scale of impacts that may flow from it.

Against the backdrop of this uncertainty, WMS 2018 expresses the need for robust regulation of environmental impacts, as well as an ambition that Government and industry will work towards creation of the world's most environmentally robust onshore shale gas sector. These statements imply that all parties involved in regulation of the industry, including the MWJP Authorities, should play their role in contributing to a suitably robust approach.

The Authorities note that, since the last EiP hearing day on 13 April 2018, hydraulic fracturing has commenced at the Preston New Road wellsite near Blackpool in Lancashire, operated by Cuadrilla. This is the first hydraulic fracturing activity undertaken in the UK since a temporary moratorium on fracking was introduced following incidents of induced seismicity, including events with a magnitude of 2.3M_L and 1.5M_L at Cuadrilla's Preese Hall well in April and May 2011. These incidents led to the subsequent introduction by Government of the 'traffic light' monitoring system for regulation of induced A review and recommendations for induced seismic mitigation, commissioned by DECC and published in 2012 (Appendix 1), recommended that we consider that the maximum magnitude threshold of 1.7 ML, initially proposed for the traffic light system, is undesirably high from the viewpoint of prudent conduct of future operations. Based on this limit, no action would have been taken before the magnitude 2.3 M_L event on 1 April 2011. Instead, we recommend a lower limit of 0.5 ML.

This lower level of induced seismicity was incorporated in the traffic light regulatory system as the 'red' trigger level at which a temporary cessation and review of fracking operations is required.

Since commencement of hydraulic fracturing at the Preston New Road Well in October 2018, seven events at or in excess of the $0.5M_{L}$ threshold have been recorded (not all of these were 'red' events requiring cessation of fracking as some were 'trailing' events occurring after actual fracking activity had stopped). The largest recorded event, occurring on 11 December 2018, was of magnitude $1.5M_{L}$. The BGS web page, (Appendix 2), reporting UK seismic activity over a rolling 100 day period indicates that two of the Blackpool events were recorded

as being 'felt' in the area. These events therefore had the potential to give rise to impact on, and cause concern to, local communities.

The Authorities make reference to this matter as contextual evidence in support of their view that there is still uncertainty about the effectiveness of regulatory processes for hydraulic fracturing at this early stage in development of the industry in the UK, and of the corresponding need to adopt a cautious approach to these forms of development, including through planning policy.

The inclusion within Policy M17 4) i) of reference to a 500m distance is based on a judgement supported by evidence (as set out in other responses by the Authorities) on the degree of separation between development and sensitive receptors that is likely to be necessary to avoid unacceptable impact. It is also a local reflection of the need for a robust approach to regulation. Alongside other hydrocarbons policies in the Plan it has the added benefit of providing a greater degree of guidance to developers and other interested parties on the types of locations where development is, or is not, likely to be acceptable, than would be provided by a more generic policy, whilst also allowing appropriate flexibility. In this respect the approach is consistent with NPPF para. 154, which requires that local plans should set out clear policies on what will or will not be permitted and where.

In any event WMS2018 does not preclude use of policy restrictions and thresholds, that limit shale development, where there is proper justification. For the reasons already provided by the Authorities in response to initial MIQs and via LPA89 (Supplementary note for 500m distance for hydrocarbon development), and through the responses now provided in response to the Inspector's further questions (December 2018), it is considered that adequate justification exists for the identification in the Policy of a 500m separation distance.

Since the EiP hearing on 13 April 2018 the Authorities have proposed further modifications to clarify the role of Policy M17 4) i) by replacing the reference to the need to ...ensure a high level of protection from adverse impacts.... with reference to the need to ...protect local communities from adverse impacts ... (see LPA 98). The term "..protect local communities..." is considered necessary in order to make it clear that this is a key purpose of the safeguards included within the Policy and therefore help ensure that the Policy can be applied in an effective way. The Authorities also propose to further clarify the role of the Policy, and provide greater flexibility, by removing reference to the need for demonstration of exceptional circumstances. The alternative wording now suggested clarifies that the requirement is for a developer to demonstrate in site specific circumstances that an unacceptable degree of impact can be avoided.

The full text of Policy M17 4) i) as now proposed, with corresponding proposed modifications to the supporting text in para. 5.146, is provided in the Appendix to this response.

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Appendix

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Main Modifications

The modifications below are expressed either in the conventional form of strikethrough for deletions and <u>underlining</u> for additions of text.

The page numbers and paragraph numbering below refer to the submission local plan, and do not take account of the deletion or addition of text.

Ref	Page	Policy/ Paragraph	Main Modification
Q4	90	M17 4) i)	Revise text in M17 4) i):
			Hydrocarbon development will be permitted in locations where it would not give rise to unacceptable impact on local communities or public health. Adequate separation distances should be maintained between hydrocarbons development and residential buildings and other sensitive receptors in order to protect local communities ensure a high level of protection from adverse impacts from noise, light pollution, emissions to air or ground and surface water and induced seismicity, including in line with the requirements of Policy DO2. Proposals for surface hydrocarbon development, particularly those involving hydraulic fracturing, within 500m of residential buildings and other sensitive receptors are unlikely to be consistent with this requirement and will only be permitted where it can be robustly demonstrated in site specific circumstances that an unacceptable degree of impact can be avoided. in

Ref	Page	Policy/ Paragraph	Main Modification
			exceptional circumstances.
Q4	94	5.146	Revise text:
Q4	94	5.146	Unlike other forms of minerals development currently taking place or expected in the Plan area, some phases of hydrocarbons development, such as the drilling of a well, require 24-hour operations. Such operations have acute potential to impact on local communities adversely, for example due to noise and light intrusion. This potential exists over much of the area that is currently subject to PEDLs, which is rural in nature, often with relatively low background noise levels, and relatively dark night skies. It is therefore important that locations for development are selected which will ensure adequate separation distances from residential property and other sensitive receptors. This would also help to ensure adequate protection from other potential impacts, such as emissions to air or water. The adequacy of separation distances to properties and other receptors will need to be determined by the Mineral Planning Authority on a case by case basis but in all cases a rigorous assessment of potential impacts is required and a high standard of effective mitigation provided where necessary. In order to ensure that an appropriately high standard of protection of local communities can be maintained, and to help to provide clarity on the approach to be followed by the Mineral Planning Authorities, it is considered that a minimum horizontal separation distance of 500m should be maintained between the proposed development and occupied residential property or other sensitive receptors, unless it can be clearly demonstrated in site specific circumstances that unacceptable impacts can be avoided, there are exceptional circumstances. A 500m distance is considered to represent a reasonable distance taking into account the potential for a range of impacts including noise, vibration, light pollution, visual impact and other emissions, as well as the potential for some forms of hydrocarbon development to generate disturbance during night time periods, when there is potential for a greater degree of perceived impact. For the purpos
			receptor' includes residential institutions such as residential care homes, children's homes, social services

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Ref	Page	Policy/ Paragraph	Main Modification
			homes, hospitals and non-residential institutions such as schools.