

## Submission to the Examination in Public of the Minerals and Waste Joint Plan: Hydrocarbons

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### 58. Should there be a distinction in Policy between conventional and unconventional hydrocarbon extraction?

This distinction is needed to provide policies that are sound and justified. Unconventional hydrocarbon development has much more widespread and severe impacts on the environment than conventional hydrocarbon development. In an advert inviting tenders for a seismic survey contractor, INEOS plan for up to 30 well pads in each 10km by 10km license area. In the Sunday Times they recently announced their plan to have 10 well pads around the National Park. It should be noted that this proposal is just the first stage in their plans. In 2015 Third Energy told the Commons Environment Committee that they would need 19 well pads with 10 to 20 well pads on each to develop unconventional gas in Ryedale.

For this reason it is necessary to protect designated sites from unconventional hydrocarbon development as included in policy M16. The financial guarantees included in policy M18 are also necessary. A decision not to make a distinction between conventional and unconventional hydrocarbons, and to remove the policy measures that apply to unconventional hydrocarbons, would bring the risk of very extensive and intensive industrial development coming to the Joint Plan Area, without due regard to the protection of designated sites, or to the need for proper decommissioning and site restoration.

While the Infrastructure Act does provide a definition of Associated Hydraulic Fracturing, this definition is not suitable for distinguishing between conventional and unconventional hydrocarbons in local authorities' planning policy. The Infrastructure Act definition, which excludes hydraulic fracturing using less than 1,000 cubic metres of fluid at each stage and less than 10,000 cubic metres of fluid overall, excludes Preese Hall, the first shale gas well to be hydraulically fractured in the UK. It would no doubt also exclude many future proposals. It is therefore necessary to have a distinction in the Joint Minerals and Waste Plan between conventional and unconventional hydrocarbons, rather than just relying on the definition of Associated Hydraulic Fracturing included in the Infrastructure Act.

For the same reason I support the Joint Minerals and Waste Plan's definition of hydraulic fracturing, which differs from the Infrastructure Act definition. The Joint Minerals and Waste Plan definition of hydraulic fracturing includes the full range of activities that are defined by that term. The inclusion of this definition is therefore justified. However amendment PC66 is not justified, as it introduces more uncertainty as to which activities are regarded as hydraulic fracturing and which are not.

While the Joint Mineral and Waste Plan's definition of unconventional hydrocarbons as initially included in the published version of the plan was justified, as it drew a clear distinction between conventional and unconventional hydrocarbons, the distinction included in amendment PC62 is not justified as it makes the distinction less clear. This amendment refers to greater and lesser porosity, without making clear what the threshold between conventional and unconventional hydrocarbons is. In this context, the use of hydraulic fracturing should remain a defining feature of unconventional hydrocarbons.

If it is decided to remove the distinction between conventional and unconventional hydrocarbons from the plan, all the conditions in the plan that currently apply to unconventional hydrocarbons should apply to all hydrocarbon development so the environment of the Joint Plan Area gets the protection it needs.

60. With respect to Policy M16 (Key spatial principles for hydrocarbon development) briefly explain the reasons for choosing a distance of 3.5km for the AONB/National Park buffer zone in part d) of the policy and how this is intended to work in practice. Is this the most appropriate distance for such a buffer?

While others will argue at the Examination in Public for the necessity of such a buffer zone to protect the landscape and setting of National Parks and AONBs, or even for the extension of the buffer zone, and I fully support their arguments, I will instead present arguments regarding the need to broaden the scope of policy M16 to require proposal for hydrocarbon developments in this buffer zone to be subject to a test regarding their impact on wildlife. This requirement is needed to make the policy sound and consistent with national policy.

Paragraph 115 of the NPPF gives protection to the wildlife of National Parks not just their landscape. It must be recognised that hydrocarbon development outside the National Park may harm the wildlife inside it, either through noise and air pollution impacts spreading over the boundary of the National Park, or through wildlife resident in the National Park being harmed by the loss of foraging opportunities adjacent to the park. NE243 England's Statutory Landscape Designations: a practical guide to your duty of regard also makes clear that development outside a National Park can still have the potential to impact the special qualities of a National Park, particularly landscape quality, wildlife, geological value and tranquillity. The significance of the North York Moors National Park to wildlife is shown by the fact that it contains a SPA and a SAC and the SPA is protected under the Birds Directive for the presence of Merlin and European Golden Plover.

The Habitats Regulations Assessment for the 14<sup>th</sup> Onshore Oil and Gas Licensing included the possibility of buffer zones around SPAs, SACs and Ramsar sites. These buffer zones would extend to 1km, or to 10km if mobile species, such as bats and birds were present in the designated site. However it was decided not to make such buffer zones a license requirement, but instead leave the matter to the discretion of planning authorities. I argue that given the risks hydrocarbon development poses to wildlife, such buffer zones should be applied in the Minerals and Waste Joint Plan. I also argue that given the significance of National Parks to wildlife, a similar buffer zone should also be applied to National Parks.

61. With respect to Policy M17 (Other spatial and locational criteria applying to hydrocarbon development) part 4) and paragraph 5.146 does the 500m buffer around residential and other sensitive receptors strike the right balance between development and protection? Should there be more flexibility in separation distances and should this be dealt with on a site by site basis (PPG 27-018-20140306)?

If any greater flexibility is to be introduced to this policy, the effect should be to extend greater protection to more heavily occupied residential areas. It should not be to weaken the protection offered to residential and other sensitive receptors. Such protection is consistent with national policy as precedents for the use of set back distances already exist in the UK. Furthermore the use of set back distances for hydrocarbon development is consistent with the NPPF. Paragraph 124 of the NPPF requires planning policies to sustain compliance with and contribute towards EU limit values or national objectives for pollutants taking account of cumulative impacts. Paragraph 109 of the NPPF requires prevention of new and existing development from contributing to or being put at risk from or being adversely effected by unacceptable levels of soil, air, water or noise pollution or land instability. Paragraph 123 of the NPPF requires planning policies to avoid noise giving rise to significant adverse impacts on health and quality of life. Paragraph 110 of the NPPF supports the aim of minimising air pollution and other adverse effects on the local environment.

Precedent for the use of set back distances has been set with regard to wind turbines. Scotland applies a 2km set back distance for wind turbines, while Wales applies a 500m set back distance for wind turbines. While neither of these two cases are completely rigid, the same is true for policy M17 as it allows hydrocarbon development within 500m of residential properties in exceptional circumstances. In fact the case for a setback distance in the case of hydrocarbon development, particularly unconventional hydrocarbon development is much stronger than in the case of wind turbines. This is because while both forms of development have a visual impact and produce some noise, hydrocarbon development also produces air pollution and heavy road traffic that continues after the initial construction of the site.

The noise impact of hydrocarbon development is also greater than that of wind turbines. Third Energy's work at their shale gas well at Kirby Misperton in North Yorkshire is only required to comply with a night time noise limit of 42dB, while wind turbines are subject to a stricter noise limit. In fact 42dB is an absolute cap on night time noise according to the WHO guidelines and British Standards. The figure of 42dB should not be regarded as a generally acceptable level of night time noise. Setting appropriate set back distances for any form of development that may cause high levels of noise is appropriate and it is more important and justified to apply them for hydrocarbon development, than it is to apply them to wind turbines.

The issue of air pollution is illustrated by the cases of West Newton A in East Yorkshire and Kirby Misperton A in North Yorkshire. At both of these sites local residents have complained of foul odours and of feeling unwell. In both cases the issue was traced back to the nearby gas well pads after a tardy response by the environmental regulator. Peer reviewed studies from the USA have shown air pollution in gas fields exceeding limits allowed in US regulations. For this reason such development is not suitable for locations close to residential areas.

The issue of safety must also be considered in decisions regarding hydrocarbons. In the USA incidents at gas wells have led to evacuation zones with a radius up to 2 miles. As the Joint Plan Area is more densely populated than many gas producing regions of the USA, the great difficulty of evacuating such a large area should be considered, as should the inconvenience and distress that such an evacuation would cause to residents.

If more flexibility is needed in the policy this should be achieved by setting greater set back distances for more heavily occupied sites. For example if there is more than one home that would be affected by the development, the set back distance could be increased to 1km. If a whole town, or village is near the development, the set back distance could be increased to 3km. The cumulative impact of multiple hydrocarbon developments should also be considered in making decisions on the proximity of hydrocarbon development to residential and other sensitive receptors.