The response from Wenningdale Climate Action Network to the opportunity given by the Inspector to produce further work on various points regarding hydrocarbons.

**Policy M16 (b) (ii) – further explanation on this policy and why drilling under a National Park/ANOB is considered to be major development.**

On April 20 2015, the U.S. Geological Survey released a report that confirmed what many scientists have long speculated: the fracking process causes earthquakes. Specifically, over the last seven years, geologically stable regions of the U.S., including parts of Alabama, Arkansas, Colorado, Kansas, New Mexico, Ohio, Oklahoma and Texas, have experienced movements in faults that have not moved in millions of years. Plus, it's difficult or impossible to predict where future fracking-caused earthquakes will occur.  

*Link to US Government report on earthquakes caused by fracking: https://earthquake.usgs.gov/research/induced/*

It is therefore impossible to claim that deep horizontal drilling under a National Park/AONB will have no effect.  
The 'Out of sight, out of mind' attitude to protecting our most precious landscapes is akin to that which has lead to the degradation of our oceans.

For both Policy M16 and M17 we would also like to draw your attention to our initial response to the Mineral and Waste Consultation on the number of truck movements resulting from 100 pads would be 1.12 million truck movements if some of the water is piped in and 3.13 million truck movements if all water if offsite as calculated from figures in the Institute of Directors Report -Infrastructure for Business “getting shale gas working” .  
*data from table 41 p.128 This could easily be an underestimate. The report was produced for and by the industry. (Plan for Ryedale is between 400-500 pads)*

**Policy M17 (4) (i) – justification on the 500m buffer around residential properties and other sensitive receptors**

A minimum separation distance of 350 metres from a residential property is applied for a typical wind turbine in England.

Ms Lieven says, "There is no comparison between fracking and wind farms, where turbines are higher, and rigs are only in place for a short time".  
She is quite right - there is absolutely no comparison.  
A wind turbine has a large visual impact and causes noise pollution close to it, but is otherwise benign.

A drilling rig and the associated fracking have the potential to cause:

- Groundwater pollution (through seepage / leakage underground, or accidental spillage of contaminated water on the surface)
- Air pollution causing a risk to human health. The University of Maryland’s School of Public Health recommended a minimum distance of 2,000 feet (over 600m) from any well. They cite studies that show increased hospitalization rates, decreased birth weights and increased cancer risks in those that live close to a well.  
  *Link for the University of Maryland’s School of Public Health report: [www.marcellushealth.org/](http://www.marcellushealth.org/)*
- Light pollution as the rig is lit up throughout the night
- Visual pollution from the 2 hectare industrial site associated with the well
- Noise pollution, if not from the drilling itself, then certainly from the associated truck movements to bring water on site and remove waste water.

The rigs will not, as she claims, only be in place only for a short time - each well site could have 20-50 well bores, each drilled successively in order to exploit the resource thoroughly, therefore most likely scenario is continuous drilling for several years.
Based on the above, there is ample justification for a 500m buffer around residential properties. Ms Lieven complains that, "The impact (of a 500m buffer zone around residential properties) would be largely to impose an exceptional circumstance test across the whole licence area. There are properties across the relevant area. For a large part of the licence area there would be an exceptional circumstances test."

The fact that drilling would be excluded in large parts of the licence area is a consequence of the fact that England is densely populated and does not have the large tracts of unoccupied land where fracking has been possible in the US. It is NOT a reason to weaken the planning laws to allow drilling in unsuitable locations because we have nowhere else to do it.

**Policy M16 (a)** we support the definitions and explanatory text that is in the Plan on the split between conventional and unconventional and are concerned that the interest and acceptance of the industry seems to be of utmost importance.

"*does not adequately address the industry concerns, need to review and look at further changes*"

MM38 on pages 31-32

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