

North Yorkshire County Council Joint Waste and Minerals Plan

Statement of Councillor Paul Andrews

Questions: 54, 56 and 60

54 Briefly explain how the section of the plan which deals with hydrocarbons is consistent with national policy

56. Taking account of the Written Ministerial Statement of 16 September 2015, does the hydrocarbon section of the Plan provide the right balance between supporting appropriate hydrocarbon development (taking account of economic and social benefits) and protecting the environment and sensitive receptors from its potential impacts.

60. With respect to Policy M16 briefly explain the reasons for choosing a distance of 3.5km for the AONB/National Park buffer zoneand how this is intended to work in practice. Is this the most appropriate distance for such a buffer?

Para.109 of the National Planning Policy Framework states: *The planning system should contribute to and enhance the natural and local environment by:*

- *protecting and enhancing valued landscapes, geological conservation interests and soils;*

It follows that the balance between supporting hydrocarbons and protecting the environment has not been achieved if the NPPF requirement valued landscapes has not been complied with. The Vale of Pickering and the Yorkshire Wolds are valued landscapes because they have been identified in the adopted Ryedale Plan as Landscapes of Local Value or Areas of High Landscape Value.

Further the whole of the Vale of Pickering is an integral part of the setting of the North York Moors National Park and the Howardian Hills AONB.

The relevant Planning Policies are set out in **Appendix 1**

The adopted Ryedale Plan is not a minerals plan, but its environmental policies should be given weight in regard to all development in Ryedale. What, for example, would be the point of having policies restricting all new housing and employment development to the towns, whilst allowing the tranquillity of the countryside and its skyline to be broken by just one fracking rig, drilling twenty four hours a day within only a few hundred yards from the nearest dwelling and less than half a mile from the village centre of Kirby Misperton.

However, that will not be the end of the development. If sufficient gas is found in marketable quantities, a precedent will have been set and it will be impossible to stop further exploration and production all over the Vale of Pickering. The gas extraction

company will be required by law to maximise extraction, and this will result in the industrialisation of the entire Vale of Pickering. It is as well to recall:

- Firstly, each fracking borehole is likely to have a range of two and a quarter kilometres – at the most. This means that, in order to fully exploit the gas field, it will be necessary for fracking pads to be no less than four and a half kilometres apart – ie 2.796 miles. There would have to be a grid of them in every direction over the Vale of Pickering and the open countryside beyond it.
- Secondly, each of these pads will have between 10 and 50 boreholes. This is because, as the gas has to be forced out of the rock, there have to be horizontal bores radiating like the spokes of a wheel in every direction and then following the grain in the rock
- Thirdly, it takes about 100 days drilling day and night to complete each borehole. So a fifty borehole pad with a single drilling rig would be in operation continuously for many years.
- Fourthly, the drilling rigs are 100ft. high, are noisy and are lit up like Christmas trees at night.

It is difficult to see how the need for any fracking in the Vale of Pickering and other areas identified in the Ryedale Plan as being landscapes of local value or areas of High Landscape Value can outweigh the environmental objections and/or policies in the plan documents listed above in regard to environmental, tourism, farming and other matters.

The answers to Questions 54 is therefore “No” and the Answer to Question 56 is also “No”

I would therefore request that the amendments suggested by Malton TC and Habton PC should be made in order to make the plan sound.

The answer to Question 60 is **firstly** that the buffer zone should cover the whole of the Vale of Pickering, in view of its said identification in the Local Plan, and the fact that the whole of the Vale is an integral part of the setting of the Howardian Hills AONB and the National Park and **secondly** that the protections offered by Policy M16(d) is not adequate to conform with the policies set out above, and therefore the Vale of Pickering should be specifically included in para. (b) (i) of Policy M16 as an area where fracking is prohibited.

Question 62

Is the possible requirement for a financial guarantee in Policy M18 for unconventional hydrocarbon development justified due to its novel approach or techniques.

This concerns the issue of safeguarding land against any undue future environmental impact after a well has been abandoned.

It may be useful to try and put the argument against the supposed “gold standard” effectiveness of UK regulations in a simple form. So I would make the following general points, although it is appreciated that the full picture is far more complex than these.

On a common sense level, fracking has to be a highly risky process. It involves installing pipes which are then encased within concrete. Stainless steel cannot be used because stainless steel is not strong enough to withstand the pressures of the fracking operation. So the materials used must succumb to rust over time – particularly after use of the well has ceased.

The concrete casing is a single cover, except where the pipe passes through an aquifer, where up to seven concrete casings may be installed. However, the whole process depends on pumping vast quantities of fluid underground under great pressure. Even the hardest concrete cracks, crumbles and breaks when exposed to vibration and stress, and it is understood that several lateral bores can radiate from a single surface vertical bore, and each lateral has to be fracked at intervals – perhaps as many as 45 times. This means that, if laterals radiate from a single surface borehole, there could be 450 fracking operations using the single surface borehole for every 10 laterals. One can multiply upwards from there and it then becomes clear that the more the surface borehole is used, the greater the risks of damage through stress to the pipe and escape of toxic fluids. One suspects that it will be in the interest of the fracking company to have as few surface boreholes as possible on any one drilling pad.

The first area where regulations become an issue is the application process, where the UK system is said to be the toughest in the world. There is a simple answer to this argument: the UK may require frackers, when making applications, to jump through more hoops than in any other country. However, generally speaking, all the fracking companies have to prove is that their proposals are “*the best available techniques at reasonable cost*”. It should be noted that this is not the same as “*Best available techniques Regardless of Cost*”. The question then has to be asked: “Who determines what are the best available techniques at reasonable cost?” The answer is the petrochemical industry itself, and, as I understand, the HSE, the EA and other regulatory bodies can do little more than require the fracking company to observe and comply with international “*industry standards*.” The petrochemical industry will, in effect, determine what is a “reasonable cost”: if the regulator disagrees and refuses the application, the applicant can appeal.

A technique which is best but qualified by “*reasonable cost*” **can in no way be described as perfectly or absolutely safe**: the best that can be said of such regulations is that they prescribe standards which are “*relatively*” safe in terms of the return expected by the industry on their investment. If so, the standards enforced by UK regulations are no more “gold standard” here than in the USA.

The second area of concern is the monitoring and regulating of the work on site. This has to be entrusted to an “independent” expert appointed and paid for by the fracking company. The point is easily made that “who pays the piper calls the tune.” As

evidence of this, I understand that neither the Preece Hall nor Preston New Road sites were stopped by reports from the “independent” experts appointed by the company: it was reporting and pressure from the public which got the statutory authorities involved.

The third area of concern relates to what happens after the fracking boreholes are closed down. The old law of Rylands v Fletcher used to apply. Under this rule of law, a landowner is liable for the escape of dangerous substances, regardless of whether or not he is guilty of negligence. The dangerous substance does not have to be toxic – in the Rylands v Fletcher case it was water escaping from a reservoir. So, under the old law, if there is a well failure such as a leak of gas or toxic chemicals into the aquifer after the borehole is capped, and if the fracking company is wound up and no longer exists, then the landowner was liable to sort the matter out or pay compensation. As I understand, the **Infrastructure Act** has changed the law so as to exempt the landowner from responsibility and to leave all responsibility for abandoned wells with the fracking company on the basis of the euphemistic sound bite: “The polluter pays”.

Please bear in mind that many fracking companies are “highly geared” in terms of borrowing: it is believed, for example that INEOS borrowing debt is in the region of five billion dollars and that Third Energy owes forty eight million pounds to its holding company which is registered in the Cayman Islands.

These concerns could be resolved if the fracker were required to obtain a bond guaranteed by a bank, insurance or building society for an indefinite period requiring the guarantor to be responsible for putting right any problems regarding well integrity and paying compensation to affected landowners. However, NYCC was not prepared to make this a condition of the consent for KM8 nor is it listed as a mandatory policy requirement in the JWMP.

(In the case of KM8 a bond was required, but only up to an amount of £160K, for surface restoration only (ie not for well integrity) and then only for a period of five years after abandonment).

So what do these gold-plated regulations amount to? Regulations which, generally speaking, are set according to the same international “industry standards” which have caused environmental and health issues worldwide; self-enforcement of regulations without any effective independent public scrutiny, and wells for which nobody is responsible for their upkeep five years after abandonment.

Mike Hill goes much further than this. In an email dated 23rd January 2018 he says:

“Rather than answering/commenting on your points etc. I think it is better for me to just state as a Chartered Engineer with 25 years in the oil and gas sector and 8 years in “fracking” (as in advising/assisting central Govt., Borough Councils, County Councils, The JRC of the EU, and author of a number of peer reviewed papers of regulations and monitoring in fracking onshore in the UK) then High Volume Hydraulic Fracturing (HVHF) of the type only applied once in the UK (PH1 in Lancashire 2011 and I was on that well at that time) in my professional opinion, as a current UK Expert Member of the Technical Working Group of the Hydrocarbon-BREF and as an experienced engineer in this field, HVHF is, without a shadow of a

doubt, totally inadequately regulated with an equally insufficient inspection strategy onshore in the UK. This leads me to conclude that the serious risks posed by fracking to the public health, the environment and to the local economy (in particular tourism and farming) in any areas where fracking is being executed are not being mitigated to anywhere near the right degree and so consequently we will shortly be faced with an unfolding disaster, the like of which we have not seen since the BSE Crisis, Foot & Mouth and Grenfell all rolled into one. What many fail to realise, including from within my own industry (on the conventional side), is that just one fracked well of the level planned for Lancashire (765K litres/stage and 45 stages per lateral) has the capacity to create a very serious threat and one that you cannot simply “shove back in the bottle.

“The Govt. I know from direct conversations with MPs and Ministers and senior members of the OGA, also fails to recognise the fact that with UFF and ONSHORE then the exploratory phase regs and monitoring needs to be of the same standard as the production phase. You cannot and must not distinguish between two. To do so is foolish and demonstrates an ignorance of the subject matter that is breath-taking and puts the public at risk – very serious risk. This argument I put to Simon Toole in 2011 (and many times since) when he was still effective Head of Shale Gas for the civil service – as we are both ex-wireline loggers then we could speak on a proper technical level. Simon did not dispute what I was saying and indeed met with me on a number of occasions, including with Ministers of State and made it clear to them that I had some very relevant points. Unfortunately Simon retired as Director of Regulation for the OGA last year and they replaced him with a lawyer! A lawyer to regulate what is a highly technical maths/engineering/science industry – he has no chance and will be entirely reliant on “others” for technical advice. No doubt he can fight in the courts though and maybe that is what the govt. are thinking/preparing for by appointing him. To me that says it all.

“Please see some of my published work: article in The Lancet, The Case (EA), Review of the Church paper, Review of the Royals Report (of which I was a contributor and am cited in the Report – this is the one the govt. are using to “justify” their case on regs via Lord Mair) and Medact 1 of which I was a contributor to three of the six chapters. All of this are still just as relevant today as when they were published. Nothing has changed to alter their conclusions.

“These papers/Briefing Notes and the work involved in compiling them (and about 20 others) are what lead me to conclude that the UK (and really here we now just mean England and NI as Wales and Scotland have effective bans – Ineos cannot frack their own country as it is banned) has a totally inadequate regulatory system ONSHORE (offshore is a different matter) with regards to HVHF. When I met with Ministers in the DECC and DEFRA between 2010 – 2015, their fundamental lack of understanding of the topics and the over eagerness of their Spads to satisfy their masters I found nauseating. It is Grenfell all over again. See also my letter to the PM to which the reply was as appalling as any of those to Grenfell experts (pre the disaster).”

The documents Mike Hill refers to are set out in **Appendix 2**

Mike's views may seem extreme but the fact that fracking has been banned in so many countries and states suggests he might be right, and the Impact of our less than gold standard regulations is acknowledged in the passages which were redacted from the DEFRA "Draft Shale Gas Rural Economy Impacts Paper"

"Shale gas may transform a previously pristine and quiet natural region, bringing increased industrialisation. As a result, rural economy businesses that rely on clean air, land, water and/or a tranquil environment may suffer losses from this change, such as agriculture, tourism, organic farming, hunting, fishing and outdoor recreation"

"Fracking may reduce the number of visitors and tourists to the rural area, with an associated reduction in spend in the local tourism economy"

"There is a risk that even if contaminated surface water does not directly impact water supplies, it can affect human health indirectly through consumption of contaminated wildlife, livestock, or agricultural products"

"Properties located within a 1-5 radius of the fracking operation may also incur an additional cost of insurance to cover losses in case of explosion on the site".

"Evidence from the US indicates that leakage of waste fluids from the drilling and fracking processes has resulted in environmental damage"

Some sectors of the economy "may lose business due to increased congestion or perceptions about the region."

"Those residents owning property close to the drilling site may suffer from lower resale prices due to the negative perception of being located near the facility and potential risks."

It is understood that all the UK's supposed "gold standard" regulations were in force when this report was published, and one therefore has to conclude that the report took them into account.

It should be clear that if the fracking companies deny these allegations and persist in their assertions that fracking is safe and will not do any long-term environmental harm, the expense of taking out an indefinite guaranty or bond guaranteed by a bank or insurance company to provide indefinite cover to third parties against the risk of harm arising as a consequence of failure of well integrity should not be difficult to obtain nor so expensive as to make the operation unviable financially. If it does, then they should not be fracking anyway.

In these circumstances, Policy M18 is not strong enough, as the requirement for a guaranty is not mandatory. The policy should be modified to make the guarantee mandatory and to cover all the consequences arising out of the risk of the failure of well-integrity for an indefinite period, both during operation and after the well has been abandoned.

Policy M18 (2) (iii) should be amended accordingly

COUNCILLOR PAUL ANDREWS

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