

Hearing Statement

on behalf of Friends of the Earth England, Wales and Northern Ireland

North Yorkshire Minerals and Waste Joint Local Plan – Reopening of Examination in Public

Unconventional Oil and Gas

Additional Hearings 24 & 25 January 2019

1. The North Yorkshire Minerals and Waste Joint Plan Examination (EiP) Hearings finished in April 2018. We note the Inspector has now re-opened the EiP to address outstanding matters regarding unconventional oil and gas.
2. Friends of the Earth (FOE) has already responded in detail to all relevant Local Plan/EiP consultations and attended all EiP hearing sessions linked to hydrocarbons. In those representations we expressed strong support for the 500m set-back zone (in draft policy M17) and pointed to evidence of the way in which it will operate for the benefit of local communities across North Yorkshire without undue sterilisation of unconventional oil and gas development. We wish to expand upon our response of 13th June 2018, reflecting our continued view that the Joint Council's approach has "*proper justification*", applying the language of WMS HCWS690 on Energy Policy¹.
3. We also provide additional commentary regarding the issue of a local definition for hydraulic fracturing in light of recent comments of the High Court when refusing permission for judicial review in *R(OAO Andrews) v SSBEIS and SSHCLG* [CO/3256/2018].

Matter 1: 500m buffer

4. Bearing in mind the Inspector's comments at para 19 (re "non-repetition") our original justification for a 500m buffer within our June 2018 submission remains relevant and are not repeated here. We would highlight the benefits arising from directional drilling within Planning Practice Guidance (see page 2); relevant noise exceedances measured at properties adjacent to the Kirby Misperton fracking site in Ryedale (page 3); the risk of adverse health impacts (page 4)

¹ <https://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Commons/2018-05-17/HCWS690>

and the policy flexibility already built-in to the *current* draft wording for policy M17 (page 6). In addition, we make the following **additional points**:

Induced Seismicity

5. Experience of hydraulic fracking at the Preston New Road site strengthens the case for the 500m buffer as currently proposed in *draft* policy M17. Seismic monitoring at the Preston New Road site is being conducted to ensure that operations are conducted in accordance with the Oil and Gas Authority’s traffic light system, as set out in Cuadrilla’s Hydraulic Fracturing Plan². With monitoring taking place, we note that the hydraulic fracking phase at PNR has been stopped a number of times due to “red events”, the most recent of which occurred on 14 December 2018³. A trailing event (a seismic event taking place *after* fracking operations have ceased) of 1.5M_L (local magnitude) was recorded around 11.30am on 11th December 2018 by the British Geological Survey⁴. By way of comparison it was earthquakes of 1.5 M_L and 2.3M_L associated with fracking at Cuadrilla’s Preese Hall site in April and May 2011 that led the Government to introduce a moratorium on fracking.
6. The April 2012 Review of the seismic events at Preese Hall commissioned by DECC makes clear the impact that induced earthquakes of this intensity can have on local people, even though structural damage is unlikely⁵:

*This leads to a maximum magnitude of ~ 3.0 M_L. An event of this size at an expected depth of 2-3 km is unlikely to cause structural damage. **There are examples of mining induced earthquakes of similar magnitudes in the UK that caused superficial damage, for example, minor cracks in plaster, but these occurred at shallower depths. Such an event would be strongly felt by people within a few kilometres from the epicenter and could cause some alarm. The critical magnitude suggested by Cuadrilla’s consultants to prevent the occurrence of damage is a conservative estimate. An earthquake with a***

² by ensuring that the operator proceeds with caution if an “Amber” (0 to < 0.5 ML) magnitude event is detected, or by pausing injection operations in the case of a “Red” (≥ 0.5 ML) magnitude event – see 6th November EA, HSE and OGA advice [note](#).

³ <https://www.independent.co.uk/news/uk/home-news/fracking-stopped-earthquake-today-lancashire-preston-new-road-cuadrilla-environment-a8683846.html>

⁴ See BGS website for seismicity data: http://www.earthquakes.bgs.ac.uk/earthquakes/recent_uk_events.html

⁵ Preese Hall Shale Gas Fracturing; Review & Recommendations for Induced Seismic Mitigation; Green, Styles and Baptie; April 2012; https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/48330/5055-preese-hall-shale-gas-fracturing-review-and-recomm.pdf

*magnitude of 2.6 M_L is also unlikely to cause structural damage, even at a shallow depth, **though again it may be strongly felt by people close to the epicentre**⁶...*

*Structural damage occurring at this magnitude is unlikely, even for a shallow earthquake, **although we note that minor superficial damage has been reported for mining induced events as small as 1.7 M_L***⁷

7. The Traffic Light System introduced following the DECC Review referred to above provides reactive mitigation which seeks to limit the intensity of seismic events caused by hydraulic fracking. But the experience at Preston New Road - since fracking commenced in October 2018 - indicates that it is not possible to avoid the risk of seismic events. There have been six seismic events at PNR above the 0.5M_L threshold recommended by the DECC Review as the trigger for “cessation of operations to cease to minimise the probability of further felt earthquakes”⁸. As noted above one of the recent seismic events at Preston New Road measured 1.5M_L, the same intensity as the 27 May 2011 earthquake at Preese Hall. The experience at Preston Road suggests that the Traffic Light System cannot either a) prevent earthquakes occurring; or b) ensure the likely range of sensitive buildings, structures and infrastructures is adequately protected (e.g. dwelling houses; listed buildings; Scheduled Ancient Monuments; gas, water, electricity and road infrastructures (et al)).

8. Residential development is just the kind of sensitive receiver which should be protected from these risks. In light of the evidence that the risk of seismic activity cannot be excluded, North Yorkshire Joint Council’s approach to providing a protective buffer is more than justified. We would ask the Inspector to also view evidence from Holland, where gas extraction has led to the Dutch government winding down major gas extraction well-ahead of scheduled end dates, due to structural damage caused from earth tremors – this also despite a similar “national need” for domestic gas⁹. While it remains to be seen whether the PNR tremors have resulted in similar structural damage to properties and infrastructure in the Fylde (Lancashire), such risk seems plausible, and a buffer zone would be justified in providing additional protection; especially in light of the precautionary principle. The considerable uncertainty and unpredictability in relation

⁶ Ibid. Summary, p. ii

⁷ Ibid. p. 6

⁸ Ibid. p. 13

⁹ Just a couple of news samples: <https://www.channel4.com/news/why-the-dutch-are-ditching-gas-extraction> and <https://www.dw.com/en/netherlands-to-shut-europes-biggest-gas-field-to-limit-quake-risk/a-43190065>

to seismicity induced by fracking operations, highlighted by the DECC Review, and the very limited experience of fracking in the UK to date certainly justifies a precautionary approach.

Ownership

9. Linked to paragraph 8 of your most recent list of questions, we note the findings of the noise report submitted to the Environment Agency in 2017¹⁰ are directly relevant - demonstrating noise level exceedances at those properties closest to the Kirby Misperton fracking site in Ryedale, North Yorkshire.
10. While those properties were only 210m and 300m from the boundary of the KMA site, it is worth noting that their owners have financial interests in the KM8 wellsite which might explain why they have been willing to tolerate higher impacts than should be expected for the wider population.¹¹ We would also highlight that one of the noisiest elements of activity associated with fracking sites – the drilling of the well – took place under a separate permission¹² between 2012 and 2013, meaning any meaningful modelling of acceptable noise limits at these two properties would not have taken this usual noisy drilling activity (as with other exploratory fracking sites) into account. These factors perhaps go some way to explaining why the distance of sensitive receptors at the Kirby Misperton site were viewed as acceptable at the time of consent.

Matter 2: Recent High Court Judgement - R(OAO Andrews) v SSBEIS and SSHCLG [CO/3256/2018]

11. We are supportive of the Inspector’s interpretation of the above judgement: essentially that MPAs are free to adopt the wider Planning Practice Guidance definition¹³ in local plans provided they have explained their reasoning for doing so and assuming they have “recognised” the statutory definition¹⁴.
12. The judge’s comments support the legality of the Joint Council’s decision to apply a local definition in the NYMWJLP. This definition links to draft policies M16 and M17, providing suitable

¹⁰ (and available on the North Yorkshire planning portal – under documents tab – see [last page](#))

¹¹ It is common knowledge that the KM8 wellsite is leased to its operators (Third Energy) by Eastpro Ltd, a company owned by a Mr Tim Easterby. Mr Easterby is a Director of Habton Farms Ltd which owns and leases Alma Farm to the current tenants. Alma Farm therefore remains – as it was at the time of the application – a financially interested property.

¹² NY/2012/0338/FUL

<https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=8620>

¹³ (ID:27-129-20140306)

¹⁴ Fracking definition within the Infrastructure Act (2015) – especially the reference to fluid volumes i.e. 1000m³ at any *each* stage or 10,000m³ in total

surface-based restrictions (including a 500m buffer) are in place for all types of “surface hydrocarbon development”, not just Associated High-Volume Fracturing as defined in legislation.

13. The Government’s response to the application for hydraulic fracturing consent in relation to the KM8 well at Kirby Misperton illustrates the need to give very careful consideration to fracking proposals falling outside the definition of “associated hydraulic fracturing” set out in section 4B of Petroleum Act 1998. At KM8 the total quantity of fracturing fluid proposed to be used was just under 3,300m³ in total and four of the five proposed fracturing stages were intended to use less than 1,000m³ of fracturing fluid. This meant that the proposals fell outside the definition of “associated hydraulic fracturing” in section 4B(1) of the Petroleum Act 1998 with the result that the statutory requirement for hydraulic fracturing consent under section 4A of the Petroleum Act was not engaged.
14. Nevertheless, Third Energy still chose to apply to the Secretary of State for hydraulic fracturing consent in the autumn of 2017. The Secretary of State’s response to this situation was to issue ministerial directions to the Oil and Gas Authority under section 9 of the Energy Act 2016¹⁵. The directions required the Oil and Gas Authority, before granting completion work approval for fracking operations where *at least one* of the proposed fracking stages was planned to involve the use of more than 1,000m³ of fracturing fluid, to require the operator to provide the Secretary of State with the information required to assess whether the conditions set out at section 4A of the Petroleum Act 1998 were met and to take account of any views expressed by the Secretary of State about those matters.
15. The effect of these directions was to apply the regulatory safeguards set out in section 4A to a much wider range of fracking proposals than those specified in the definition of “associated hydraulic fracturing” at section 4B(1) of the Petroleum Act 1998. The Secretary of State’s approach is a clear indication that he considered that it was in the public interest to apply stringent regulatory safeguards to fracking proposals falling *outside* the strict parameters of the section 4B(1) definition.
16. The approach adopted by the Secretary of State to the fracking operations proposed at KM8 and other similar proposals sets a very clear precedent for applying appropriate regulatory safeguards to fracking operations that do *not* fall within the statutory definition of “associated hydraulic

¹⁵ The directions came into force on 29th November 2017.

fracturing". This is, again, consistent with the approach adopted in draft policies M16 and M17 of the NYMWJLP.

17. Overall, we invite you to conclude that the proposed wording of draft policies M16 and M17 have been properly justified (so as to comply with the WMS) and that the policy is sound in terms of the NPPF.

Friends of the Earth England, Wales and Northern Ireland

11 January 2019