

Dear Elizabeth Ord,

I'm writing to you to submit my comments for the new hearings on the Minerals and Waste Joint Plan, which will take place on 24 and 25 January.

You have asked if Policy M17, in particular the 500m zone around sensitive receptors included in point 4) i) of the policy, is justified. While I think that the stronger wording included in this policy prior to the Examination in Public was better than the current wording, in that it provided a greater level of protection to the public, I still do believe that the modified wording is justified.

You have noted that the drilling and workover of the KM8 shale gas well did take place with sensitive receptors less than 500m from the site. However, that development was permitted before the adoption of the Minerals and Waste Joint Plan that is the subject of this Examination in Public. The adoption of a new Minerals and Waste Joint Plan offers an opportunity to improve on existing policy and to take into account impacts that minerals development in North Yorkshire and in other parts of the country have caused.

You have asked if Policy M17 is sound in the context of the 2018 Written Ministerial Statement on shale gas. However, the recent legal challenge brought by Paul Andrews has clarified that this Written Ministerial Statement has the status of guidance. This means that while the local authorities are required to give it consideration, they are still free to develop their own minerals policies, that might differ from the Written Ministerial Statement in some respects, provided that those policies are sound. There is no reason to believe that any departure that Policy M17 makes from the Written Ministerial Statement renders it unsound, as the measures the policy contains are fully justified.

It is particularly important to take into account the events of the past few years when formulating policy on hydrocarbons, in particular unconventional hydrocarbons. While the experience of unconventional hydrocarbons development in this country is still very limited, the impacts of the exploration for shale gas at a number of sites across the country, including Kirby Misperton, and the hydraulic fracturing at Preston New Road should be considered in policy making. As the impacts of such development become clear, it is right that policy should be adapted to take those matters into account. It therefore, does not follow that a development that because the drilling and hydraulic fracturing of the KM8 well was permitted under previous policies, it must be considered acceptable under any new policy.

In your questions for the new hearings you have rightly placed great importance on the issue of noise. However, the issues of air pollution, water pollution and public safety in the event of an emergency should also be given great weight. When considering all of these issues, the cumulative impact of the drilling and hydraulic fracturing of thousands of new gas wells in the Joint Plan area must be considered, as such a level of development is necessary for the commercial success of the shale gas industry.

With regard to the issue of noise, it is becoming increasingly clear that this is an important source of negative impacts during oil and gas development. The distress caused to residents during the drilling of the KM8 well was described during earlier hearings, but it has now become clear that there was excessive noise during the workover of that well from Autumn 2017 onwards. A report from Castle Consulting shows that Alma House, which is 0.31km from the site suffered in excess of 29 site related noise exceedences, while Shire Grove 0.8km from the site suffered in excess of 15 site related exceedences. This evidence shows that oil and gas development is a source of excessive noise and that the frequency at which excessive noise occurs, is related to the distance between the site and sensitive receptors. You have raised the possibility of such excessive noise being dealt with through mitigation, including the use of new drilling techniques. However, it should be noted that in

the case of KM8 it was both the drilling and the workover that caused excessive noise. It should also be noted that a measure was in place to mitigate the impact of noise during the workover, that is an acoustic barrier was installed, but that this was not enough to prevent excessive noise impacting nearby homes. Noise exceedences have also occurred at the Preston New Road shale gas site in Lancashire, during Cuadrilla's works there. ²

Air pollution has also been at source of severe, negative impacts during the works at Kirby Misperton. Monitoring found that, during the works at Kirby Misperton NOx levels there were elevated to levels typically seen in urban centres, whereas previously they had been characteristic of a rural environment. Elevated hydrogen sulphide levels were also observed during monitoring. While this hydrogen sulphide pollution might not be related to shale gas, it is still relevant to Policy M17, as that policy covers all hydrocarbons development, not just shale gas development. Urban air pollution is a very serious issue in this country, that causes great harm to public health. For this reason, it has been the subject of a number of successful legal challenges to the government. In this context, it is not justified to permit a pattern of hydrocarbons development that brings similar problems of air pollution to rural areas that have not previously experienced them.

Oil and gas development also presents a risk of water pollution. Groundwater is used in the Joint Plan Area for domestic and agricultural water supply. A report on oil and gas well integrity found that 10 % of UK North Sea oil and gas wells and 38% of abandoned Norwegian oil and gas wells show signs of failure forcing the wells to be shut in. ⁴ This pattern of well failures puts groundwater in danger of contamination. In the case of the Bowland Shale, such contamination could be very serious, as a recent report has shown the Bowland Shale to contain dangerous levels of Selenium. ⁵

Oil and gas wells are also a risk to public safety. That risk is exacerbated when homes, workplaces and recreational facilities are close to oil and gas wells. In the event of a hydrocarbon well blowout there would be a serious emergency, with widespread pollution and the risk of a destructive fire, or explosion. In 2010 the International Association of Oil and Gas producers found that the rate of blowouts was 0.18% per well completion and workover. ⁶ Given that there is now the possibility of thousands of new unconventional gas wells in the Joint Plant Area this risk cannot be dismissed. In the USA set back distances of 320ft are used in some shale producing areas, but this level of separation is inadequate, as a study concluded that people exposed to the intense heat of a fire from a blowout would experience second degree burn blisters after 22 seconds at that distance.

Given the impacts that unconventional gas development can cause, it is right that local authorities seek to manage these impacts through the plan making process. The local authorities of Greater Manchester recently announced that they would include a presumption against hydraulic fracturing in their local plan. The Mayor of London has also launched a draft local plan that will effectively ban hydraulic fracturing in London. ⁸

I will be at the hearings on 24 and 25 January. I look forward to seeing you there.

Yours Sincerely,

Kit Bennett

¹ onlineplanningregister.northyorks.gov.uk/Register/DisplayImage.aspx?doc=cmVjb3JkX251bWJlcj05NzYxP2ZpbGVuYW1lPVxcY291bnR5Lm55Y2MuaW50ZXJuYWx cRGF0YVxCRVMtREFUQVxBcHAtTWVzdGVyR292XHBsYW5uaW5nXE5ZLTIwMTUtMDIz My1FT1ZcMjQgUG9zdCBEZWNpc2lublXOb2lZSBNb25pdG9yaW5nXDE3MTEyOV9QcmVTd GltWxhdGlvlBlBoYXNlX05vaXNlTW9uaXRvcmluZ1JwdF9yZXYyX3JlZGFjdGVkLnBkZj9pb WFnZV9udW1iZXI9ODg1LjAwMDAaW1hZ2VfdHlwZT1wbGFubmluZz9sYXN0X21vZGlmaW VkX2Zyb21fZGlzaz0wNy8xMi8yMDE3IDExOjU0OjQy

² cuadrillaresourcesportal.com/nov2018.html

³ nora.nerc.ac.uk/id/eprint/517889/1/OR_17_049__PhaseII_Final_Report_280917.pdf

⁴ sciencedirect.com/science/article/pii/S0264817214000609

⁵ pubs.geoscienceworld.org/qjegh/article/51/4/503/537240/liberation-of-selenium-from-alteration-of-the

⁶ ncbi.nlm.nih.gov/pmc/articles/PMC5010420/

⁷ OGP Blowout Frequencies, International Association of Oil and Gas Producers, 2010

⁸ theguardian.com/environment/2019/jan/04/greater-manchester-tells-fracking-firms-they-are-not-welcome