



FACULTY OF
PUBLIC HEALTH

Permitted development for shale gas exploration

Faculty of Public Health
Sustainable Development Special Interest Group (SIG)
Response to consultation

Question 1

- a) Do you agree with this definition to limit a permitted development right to non-hydraulic fracturing shale gas exploration? Yes/No
b) If No, what definition would be appropriate?

No – If such exploration is to be included within permitted development rights (which we disagree with – see below), then the definition needs explicitly to state that it excludes the injection of any fluids for the purpose of hydraulic fracturing.

Question 2

Should non-hydraulic fracturing shale gas exploration development be granted planning permission through a permitted development right? Yes/No

No. The Faculty of Public Health believes there should be an immediate moratorium on the production of shale gas through hydraulic fracturing, which clearly implies a cessation of any exploration of shale gas, and the granting of any permissions for such exploration. To make this a permitted development right would therefore be illogical and perverse.

Hydraulic fracturing (fracking) is a significant public health threat, both because of its immediate and local impacts, but also because of the potentially catastrophic public health impacts of climate change caused by greenhouse gas emissions.^{i, ii}

Although the evidence linking hydraulic fracturing to ill health is contested, and any actual harm done will depend on many local factors including the proximity of local populations, how the site is managed, geological and meteorological conditions, nevertheless there are significant grounds for concern. Fracking causes air pollution and water contamination, including with toxins that are linked to increased risks of cancer, birth defects and lung disease.^{iii, iv, v, vi, vii, viii, ix}, in addition to which there are negative health impacts associated with noise, traffic, damage to the natural environment and local social and economic disruption. These risks are potentially greater in the UK than in other countries because of the proximity and size of surrounding populations. Whilst these adverse health impacts are not proven, the precautionary principle mandates avoiding unnecessary risk, and puts the onus on proposers of the developments to demonstrate that it is safe.

Of greater concern, however, is the impact of the exploitation of yet more fossil fuel reserves on greenhouse gas emissions and climate change, and the threat this poses to human health. The International Panel on Climate Change (IPCC) has this month re-iterated its warnings about the likely consequences of anthropogenic climate change, and re-iterated, even more forcefully, the vital importance of keeping global warming to less than 1.5°C above pre-industrial levels.^x This will require rapid progression to overall 'carbon neutrality' which in turn makes it essential that the overwhelming bulk of fossil fuel reserves, including shale gas, are not extracted and used.

Working to improve the public's health

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Global warming above this amount will likely have significant, if not catastrophic, effects on human health worldwide, due to direct weather effects (including sea level rise and flooding), adverse impacts on food and water availability, increased transmission of infectious diseases, and adverse public health impacts mediated through human activity, including mass migration and conflict.

Although shale gas may generate less carbon dioxide (and produce fewer other pollutants) per unit of electricity generated than some other fossil fuels, in particular coal, this argument is specious since in the UK coal fired power stations are being phased out in any event. The more relevant comparison is with renewable energy sources, where the technology is now well established and could be rolled out more rapidly. Furthermore, shale gas is methane, a significantly more powerful greenhouse gas than carbon dioxide, and hydraulic fracturing, however well conducted, leads to atmospheric releases of significant amounts of this.

Hydraulic fracturing, and the widespread use of shale gas could only be compatible with our pressing need to reduce greenhouse gas emissions to net zero by mid century (and arguably, also with the requirements of the 2008 Climate Change Act), were any development required to have net zero impact itself. This could be achieved either by mandating that any shale gas combustion is combined with fully effective carbon capture and storage, or by ensuring that the use of shale gas displaces a larger amount of alternative fossil fuel use. This could possibly be achieved by putting obligations onto the energy generating companies to demonstrate that they have done this.

Finally, to include non- hydraulic fracturing shale gas exploration as a permitted development right would (as would also be the case were shale gas production projects included in the National Significant Infrastructure Programme) significantly undermine local democracy and decision making. It would be in marked contrast to the current Government's position on windfarm applications which is to give 'local people a final say on such applications' and requiring local planning authorities to grant permission only once 'following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing'.^{xi}

The FPH notes that an all party Planning Committee decision in Lancashire voted to reject Fracking in the County- a decision subsequently overruled by the then Communities Secretary Sajid Javid in 2016.^{xii} The FPH believes that the views of democratically elected representatives of local communities affected by planning decisions on Fracking should be paramount in deciding which developments are appropriate and thus permitted for their area. The views of residents directly affected should take priority over non-residents who may simply have a commercial or other interests in allowing unwanted developments in communities in which they do not live.

Question 3

a) Do you agree that a permitted development right for non-hydraulic fracturing shale gas exploration development would not apply to the following? Yes/No

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- Areas of Outstanding Natural Beauty
- National Parks
- The Broads
- World Heritage Sites

- Sites of Special Scientific Interest
- Scheduled Monuments
- Conservation areas
- Sites of archaeological interest
- Safety hazard areas
- Military explosive areas
- Land safeguarded for aviation or defence purposes
- Protected groundwater source areas

b) If No, please indicate why.

c) Are there any other types of land where a permitted development right for non-hydraulic fracturing shale gas exploration development should not apply?

Our view is that non-hydraulic shale gas exploration should not be a permitted development right anywhere in England and Wales.

Question 4

What conditions and restrictions would be appropriate for a permitted development right for non-hydraulic shale gas exploration development?

Our view is that non-hydraulic shale gas exploration should not be a permitted development right. No conditions or restrictions are therefore relevant.

Question 5

Do you have comments on the potential considerations that a developer should apply to the local planning authority for a determination, before beginning the development?

Question 6

Should a permitted development right for non-hydraulic fracturing shale gas exploration development only apply for 2 years, or be made permanent?

Our view is that non-hydraulic shale gas exploration should not be a permitted development right for any length of time.

Question 7

Do you have any views the potential impact of the matters raised in this consultation on people with protected characteristics as defined in section 149 of the Equalities Act 2010?

As a general rule, adverse public health impacts are always worse for people from disadvantaged groups, including those with protected characteristics under the Equalities Act. The expressed view that the matters raised in this consultation will not have a negative direct or indirect impact on people with protected characteristics, is therefore misguided and wrong. For example, the adverse local effects of air and water pollution, and noise and traffic, are likely to impact significantly more on people from more socio-economically disadvantaged groups, which disproportionately includes women, in particular women with young children, and the elderly, as well as people with disabilities. Similarly, the adverse public health consequences of climate change and global warming will impact far more on

the socio-economically disadvantaged, people with disabilities, the old and the young. Increased migration and large numbers of climate change refugees may well exacerbate racial tensions and tension between religious groups.

ⁱ McCoy D, Saunders P, Fracking and health. *BMJ* 2018;361:k2397 <https://www.bmj.com/content/361/bmj.k2397>

ⁱⁱ A review of the public health impacts of unconventional natural gas development: Saunders, P.J., McCoy, D., Goldstein, R. et al. *Environ Geochem Health* (2018) 40: 1. <https://doi.org/10.1007/s10653-016-9898-x>

ⁱⁱⁱ Hays J, Shonkoff SBC. Toward an Understanding of the Environmental and Public Health Impacts of Unconventional Natural Gas Development: A Categorical Assessment of the Peer-Reviewed Scientific Literature, 2009-2015. *PLoS One* 2016;11:e0154164. 10.1371/journal.pone.0154164. 27096432

^{iv} McKenzie LM, Blair B, Hughes J, et al . Ambient Nonmethane Hydrocarbon Levels Along Colorado's Northern Front Range: Acute and Chronic Health Risks. *Environ Sci Technol* 2018;52:4514-25. 10.1021/acs.est.7b05983 29584423

^v Walker Whitworth K, Kaye Marshall A, Symanski E. Drilling and Production Activity Related to Unconventional Gas Development and Severity of Preterm Birth. *Environ Health Perspect* 2018;126:037006. 10.1289/EHP2622. 29578659

^{vi} McKenzie LM, Allshouse WB, Byers TE, Bedrick EJ, Serdar B, Adgate JL. Childhood hematologic cancer and residential proximity to oil and gas development. *PLoS One* 2017;12:e0170423. 10.1371/journal.pone.0170423. 28199334

^{vii} McKenzie LM, Guo R, Witter RZ, Savitz DA, Newman LS, Adgate JL. Birth outcomes and maternal residential proximity to natural gas development in rural Colorado. *Environ Health Perspect* 2014;122:412-7.24474681

^{viii} Werner AK, Vink S, Watt K, Jagals P. Environmental health impacts of unconventional natural gas development: a review of the current strength of evidence. *Sci Total Environ* 2015;505:1127-41. 10.1016/j.scitotenv.2014.10.084 25461113

^{ix} Hays J, McCawley M, Shonkoff SBC. Public health implications of environmental noise associated with unconventional oil and gas development. *Sci Total Environ* 2017;580:448-56. 10.1016/j.scitotenv.2016.11.118 27939937

^x IPCC ref

^{xi} House of Commons: Written Statement (HCWS42) Department for Communities and Local Government Written Statement made by: Secretary of State for Communities and Local Government (Greg Clark) on 18 Jun 2015; Ministry of Housing, Communities & Local Government. National Planning Policy Framework July 2018

^{xii} <https://www.bbc.co.uk/news/uk-england-lancashire-37567866>