

CONSULTATION URN 14D/099

UNDERGROUND DRILLING

ACCESS

1. Should the Government legislate to provide underground access to gas, oil and geothermal developers below 300 meters?

The government should not alter current legislation to allow underground access to gas or oil for developers. Underground horizontal drilling at the depths relevant for shale would allow companies to pursue hydraulic fracturing (fracking) and other forms of unconventional gas extraction which would have serious negative impacts on landowners' use of their land, their health and the environment.

Problems with Fracking

Since fracking first started to be done on an industrial scale in the US, several problems have emerged that would seriously detriment landowners' use of their land if permitted in the UK.

Groundwater contamination

Groundwater contamination is an ever present risk with hydraulic fracturing. Data from America indicates that 5% of all wells fail the moment they are completed and that this failure rises with the age of the well (1).

Even if we assume a failure rate of 5% across all wells regardless of their age, the sheer number of wells that need to be drilled in order to exploit shale reserves means that this poses a significant risk of groundwater contamination and not the negligible risk as stated.

In America, the concentration of methane in wells near fracking sites has been shown to be 17 times higher than in normal wells (2). There have been over 1,000 documented cases of water contamination next to areas of gas drilling as well as cases of sensory, respiratory, and neurological damage due to ingested contaminated water. As the UK is far more densely populated than the US, this number is likely to be much higher.

Air Pollution

Hydraulic fracturing causes an immense amount of air pollution. Each gas well requires over 300 tanker trucks to carry water to and from the fracking site (3) (4), adding to air pollution. A similar number are required for every subsequent frack and wells can be fracked up to six times in their lifetime.

Before wastewater produced from fracking is trucked to a processing facility for disposal, it is stored in wastewater ponds and condensate tanks for several days. These tanks spray the liquid into the air in an attempt to release volatile organic compounds (VOCs) and make the remaining liquid easier to dispose of (3). This spraying happens 24 hours a day, seven days a week.

As the VOCs are evaporated they create contaminated air and acid rain. When these VOCs come into contact with diesel exhaust from trucks and generators at the well site, they produce ground level ozone is produced. Ozone plumes can travel up to 250 miles (5) and are hazardous to human health (5) (6).

In addition to this, methane and CO₂ from the gas production and combustion process contribute to global warming (7).

Increased Traffic

Each hydraulic fracturing well requires 400 trucks to carry water to and from the fracking site. This represents a significant increase in freight traffic for rural communities which will likely to degrade the surface of local roads, increase congestion and noise pollution and increase the risk of road accidents.

2. If you do not believe the Government should legislate for underground access, do you have a preferred alternative solution?

I believe that the Government should not pursue further exploitation of our fossil fuel reserves and should impose a moratorium on unconventional oil and gas extraction. We should promote renewable energy and engage in a scheme fully insulate all residential properties in the UK.

Moratorium on unconventional gas extraction We do not need to allow underground access to our land in order to aid the economy. France has successfully maintained a moratorium since 2011 (8) years without detriment to its economy or its populace. This ban was successfully upheld in 2013 after complaints by US-based Schuepbach Energy (9).

Renewable energy Since the privatisation of the energy industry in 1990, the UK has seen the lowest levels of investment in energy infrastructure in [number] years. The UK has enough wind, solar, tidal and geothermal energy so that, with the correct investment and incentives, we could meet all of our energy needs without resorting to fossil fuels.

As we see from countries like Germany and Sweden it is possible to make this transition with minimal disruption and in a manner that positively enhances local communities (10). In addition to these benefits, renewable energy would allow the UK to become more energy independent and not rely on foreign gas and oil imports.

Better insulation Homes and buildings in the UK are some of the most inefficient in Europe. Before we even begin to think about providing companies with easier routes to engage in fracking and unconventional oil and gas extraction, we need to look at the amount of energy we use in the UK.

21% of the UK housing stock was built before 1919 (11) and much of this is inadequately insulated. 31,100 people die each winter (12) because they cannot afford to heat their homes and fuel poverty rose by 250% between 2004 and 2011 (13). When compared to EU states with similar climates and income levels, including Germany, France and the Benelux countries, the UK has the highest rate of fuel poverty (14).

If the UK were to engage in a nationwide scheme to properly insulate each home in the UK, this would have the twofold benefit of creating high-skilled jobs in a tough economic climate and reducing our need to consume energy—especially fossil fuels.

3. Should a payment and notification for access be administered through the voluntary scheme proposed by industry?

I do not believe that the voluntary scheme proposed by the industry is fit for purpose. In its current form, it does not protect the local community from exploitation and leaves many loopholes by which companies could not pay compensation, or use the compensation on schemes that benefit themselves and not the local community:

1. **£20,000 is not enough.** The sum proposed for each lateral well that extends for more than 200m is insufficient to cover local residents for the likely damage to their land, health communities and livelihoods that fracking and unconventional gas extraction would cause. In highly populated areas, where more people would be subjected to the negative health effects of fracking, £20,000 per well would not nearly be enough to compensate local people for their medical care and/or time off work.
2. **There are no clear guidelines on what these discretionary payments can be used for.** Unless the permissible uses the proposed compensation are clearly defined, the scheme will be open to abuse by oil and gas companies. E.g. A Fracking Company could presumably use the compensation payment to pay the local council to improve local roads in the area. This would be of little use to residents as their roads would still far

more congested than if the company was not present, but the improved roads would aid the fracking company's logistics immensely.

3. **No system has been proposed by which members of the 'community group' get to decide on what the payment will be used for.** As above, unless members of the community have a clear mechanism to collectively decide on what the compensation payments could be used for, the system would be open to abuse.
4. **The negative effects of allowing companies to access shale gas and oil cannot be confined to a locality.** Fracking causes a great deal of air pollution, which is transient, and adds to the on-going problem of global warming. The negative effects of these can be felt tens, hundreds and thousands of miles away from their source. To try and define a 'community body' for the purposes of recompense is futile as no definition could hope to include all people whose use of their land has been negative impacted by fracking.
5. **The compensation scheme is voluntary.** Whilst the consultation does outline that there should be legislation to ensure that companies pay this 'voluntary amount' this legislation does not yet exist. Until it does, fracking companies could refuse payment to the community without reprisal.
6. **Notification is voluntary.** Notification of fracking activities should be mandatory because of the significant impacts it has on the local and wider area. It is not sufficient to have a 'voluntary' notification scheme as companies could simply choose to not notify in areas they know contain people opposed to fracking and unconventional gas extraction.

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