

John Hayes MP

Minister of State

Department of Energy & Climate Change
3 Whitehall Place

London

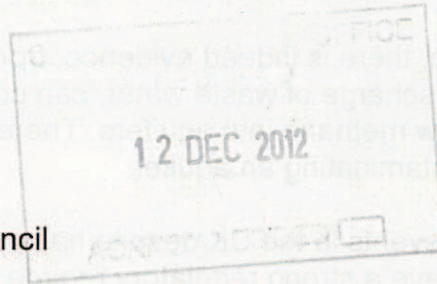
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Catherine Vaughan
Acting Chief Executive
Brighton & Hove City Council
King's House
Grand Avenue
Hove
BN3 2LS



December 2012

Dear Ms Vaughan,

Thank you for your letter dated 8 November to Owen Paterson, enclosing a motion from Brighton & Hove Council regarding hydraulic fracturing (fracking) for shale gas. Your letter has been passed to the Department for Energy and Climate Change as it falls within our remit and I am replying as this matter falls within my portfolio.

It is clear that, even as we move towards a less carbon intensive future, oil and gas are set to remain a vital part of our energy system for years to come. In this context, the UK Government is committed to ensuring that we maximise economic recovery of UK hydrocarbon resources – both offshore and onshore.

Alongside other energy sources, including renewables, we hope that unconventional hydrocarbon resources, such as shale gas and coal bed methane, might prove to be a useful future addition to the UK's energy mix. We therefore support industry endeavours and exploration so long as these are carried out safely and with due regard to the environment. However, it is clear that we need to navigate a careful path and, as you may know, since the earthquakes which took place near Blackpool in April and May last year, all shale gas fracking has been suspended.

We are currently looking at all of the comments received in response to the experts' report on seismicity. We are also considering the recommendations of the very valuable report by the Royal Society, reviewing the scientific and engineering evidence on the risks of fracking for shale gas. We hope to announce our conclusions soon.

We consider that we have a robust regulatory regime with world class regulators. To ensure full coordination of their work we have established a strategy panel, chaired by DECC, and including HSE, Defra, DCLG and the Environment Agency to oversee strategic and regulatory issues in relation to shale gas.

The current activity is limited to exploration. A possible future production phase could introduce new regulatory issues, and the Environment Agency has a shale gas programme that includes a detailed review to ensure that they have the right powers and resources to protect the environment during that production phase. Other regulators, including DECC, will contribute to that review.

The Prime Minister has confirmed that any future shale gas production would have to meet stringent safety and environmental standards, follow deep consultation with local communities and fit within our overall energy commitments.

With regard to water contamination, there is indeed evidence, from the US, that accidental spills of chemicals, or discharge of waste water, can contaminate streams, and badly cemented wells can allow methane into aquifers. There is however no confirmed evidence of fracking contaminating an aquifer.

There have been no such serious events in the UK despite half a century of oil and gas operations. We consider that we have a strong regulatory regime in place, administered by the HSE, the respective environmental agencies and the planning authorities, to ensure that *potential risks to safety or the environment*, including those encountered in the US, are properly managed.

With regard to volumes of water used in fracking, it is worth pointing out that for fracking the *actual volumes* of water required are not at all exceptional compared to other industrial activities which routinely take place across the UK. Operators would typically use in total between 10,000 cubic metres and 20,000 cubic metres of water to drill and carry out hydraulic fractures on a well.

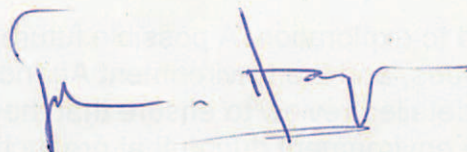
Fracking is carried out for a few days to get the gas flowing, so the technique is only *used for the initial production phase* and perhaps again later when production levels begin to drop off. Any operator who wishes to abstract water will need a *licence from the relevant environment agency*, who will only authorise additional water abstraction when there is water available and there are no risks posed to the rights of existing abstraction licence holders. The agencies have powers to impose appropriate restrictions where these are justified in the particular context.

Likewise, disposal of wastewater is subject to permits. Flow-back fluids are deemed to be a mining waste and require an environmental permit for their management, and disposal will be at a suitably permitted waste water treatment works. Final disposal of the returned flow-back fluid is regulated by the environmental regulator; (the Environment Agency *in England and Wales*, and SEPA in Scotland).

The disposal method for flow-back fluid is agreed between the operator, their contractors and the Environmental Regulator. Prior to receiving an environmental permit for disposal to a waste water treatment works, a review of options is undertaken to ascertain the most appropriate method.

The Government is taking a careful and pragmatic approach to shale gas exploration and fracking in the UK and will continue to do so to ensure that, should fracking operations be allowed to continue, the environment will be properly protected.

Yours sincerely,



JOHN HAYES